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32nd  
Annual Report

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Board of Water  
Commissioners

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1896-7

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Thirty-Second Annual Report  
OF THE  
BOARD OF WATER COMMISSIONERS,  
TO THE  
Select and Common Councils  
CITY OF READING  
OF THE  
CITY OF READING.

Being for the Fiscal Year Beginning April 6, 1896, and Ending April 5, 1897.



READING, PA., MAY 25th, 1897.

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1896/7

# WATER DEPARTMENT

OF THE  
CITY OF READING.

ORGANIZED MARCH 28, 1865.

## PRESENT ORGANIZATION OF DEPARTMENT.

GEO. H. FELIX, *President.*

Term expires Feb., 1899.

MATTHAN HARBSTER,

Term expires Feb., 1899.

FRANK A. TYSON,

Term expires Feb., 1901.

F. P. HELLER,

Term expires Feb., 1901.

EMIL L. NUEBLING, *Superintendent and Engineer.*

HARRY K. BROWN, *Assistant Superintendent.*

SAMUEL D. KOCH, *Draughtsman.*

RICHARD ROBINSON, *General Foreman.*

E. L. LINDEMUTH, *Secretary.*

JAMES HANGEN, *Chief Clerk.*

FRITZ M. SCHROEDER, *Assistant Clerk.*

*Engineer*—Maidencreek Pumping Station, WM. H. KETCHLEY.

*Assistant Engineer*—Maidencreek Pumping Station, NATHAN  
AUCHENBACH.

CHAS. E. MILLER, *Inspector.*

GEORGE J. BUTLER, *Inspector.*



MEMBERSHIP AND TERM OF OFFICE  
OF THE  
**Board of Water Commissioners.**  
1865-1897.

FIRST DISTRICT.

	David A. Stout.....	1865—1873.
	Solomon L. Snyder.....	1873—1877.
*Dec., 1880.	Geo. K. Levan.....	1877—1880.
	Matthias Mengel.....	1880—1881.
†Apr. 10, 1883.	Chas K. Hillegass.....	1881—1883.
*May, 1890.	Jacob Holl.....	1883—1890.
	Frank A. Tyson.....	1891 —.

SECOND DISTRICT.

†Feb. 26, 1867.	John Malzberger.....	1865—1867.
	Thos. L. Addison.....	1867—1873.
	Aug. C. Greth.....	1873—1877.
*Sept., 1877.	Chas. Melcher.....	1877 —.
	Thos. L. Addison. ....	1877—1885.
†Feb. 17, 1892.	Albert A. Heizmann....	1885—1892.
*June 7, 1892.	Jesse Orr.....	1892 —.
	Abner S. Deysher.....	1892—1893.
	Fred'k P. Heller.....	1893 —.

THIRD DISTRICT.

Jacob Bushong .....	1865—1867.
Jacob C. Hoff.....	1867—1871.
Wm. R. McIlvain.....	1871—1883.
Isaac McHose.....	1883—1887.
James Rick .....	1887—1891.
Matthan Harbster.....	1891 —.

FOURTH DISTRICT.

Joseph Mishler.....	1865—1867.
Levi J. Smith.....	1867—1875.
Addy Gehry .....	1875—1879.
Levi J. Smith .....	1879—1883.
F. S. Jacobs.....	1883—1891.
Geo. H. Felix.....	1891 —.

\*Died. †Resigned.





OFFICERS  
OF THE  
**Board of Water Commissioners.**  
1865—1897.

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*Presidents :*

Jacob Bushong .....1865—1867.  
David A. Stout.....1867—1873.  
Wm. R. McIlvain.....1873—1883.  
F. S. Jacobs.....1883—1891.  
A. A. Heizmann.....1891—1892.  
Geo. H. Felix.....1892 ———.

*Secretaries :*

\*Feb., 1873. B. F. Haus .....1865—1873.  
E. A. Howell.....1873—1879.  
John H. Keppelman.....1879—1884.  
Geo. H. Felix.....1884—1889.  
Cyrus T. Fox.....1889—1890.  
I. C. Fetter .....1890—1896.  
E. L. Lindemuth.....1896 ———.

*Superintendents :*

†Apr. 1, 1882. Marks B. Scull .....1865—1882.  
†Mar. 1, 1892. Wm. B. Harper.....1882—1892.  
†May 1, 1895. Wm. B. Albright .....1892—1895.  
Emil L. Nuebling.....1895 ———.

\*Died. †Resigned.



# 32d ANNUAL REPORT

OF THE

## Board of Water Commissioners

To the Select and Common Councils of the City of  
Reading,

FOR THE FISCAL YEAR OF 1896-'97.

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OFFICE OF THE  
BOARD OF WATER COMMISSIONERS,  
CITY HALL.  
READING, PA., May 25th, 1897. }

*To the Honorable, the Select and Common Councils of the City  
of Reading, Pa. :*

GENTLEMEN :

The Board of Water Commissioners submit for your information this, the thirty-second annual report of the condition and operations of the water works system, being for the fiscal year beginning April 6, 1896, and ending April 5, 1897.

In the report of the Superintendent and Engineer, herewith submitted, will be found tabulated statements, giving in detail the cost of the system, its operation, full statements of the cost of each class of work, the account of fire hydrants, valves and meters, the daily consumption, and a great deal of other interesting and important information pertaining to the water works. The statements are so complete, so thorough, and contain so much statistical and technical information that it is with pleasure we commend them for your consideration. A vast amount of labor is connected therewith and numerous books required to be kept in the Superintendent's office ; but all the data thus secured is of a permanent character and valuable for future reference. The results thus attained fully justify the action of the Board in establishing the rule to require the Superintendent to prepare and submit this information, and he has our highest appreciation for the very thorough manner in which he has complied with our requests, and we feel sure his efforts will be productive of a great amount of good to the department, and instructive in water works problems generally.

The report of the Chief Clerk, referring to the business end of the department, is also worthy of your careful perusal, and as well that of the Inspectors.

## FINANCES.

The total receipts from all sources, with the balance at the beginning of the year, were \$137,690.86, and the expenditures \$128,483.98, leaving a balance of \$9,206.88. The decrease in the total revenue of \$5,633.58 is due principally to a decrease in frontage tax and collections in City Solicitor's office, the former showing for this year a decrease of \$3,461.50, and the latter \$1,612.67. There is also a decrease in miscellaneous receipts of \$65.78, in rents from real estate of \$237.50, in ferrules \$104.31, in penalties \$190.71, penalty for violation of rules \$5.00. The decrease from rents was \$43.89. There is, however, an increase in the amount of uncollected rents of \$2,194.08. Comparing this with the previous year, deducting the \$43.89 from this sum, would show the net increase in water rents from new consumers, &c., to be \$2,150.19. Of the \$128,483.98 expended during the year, there was \$63,916.39 expended for construction and permanent improvements, the more important items being: for improvements at Maidencreek property, \$3,408.35; completion of Buttonwood Street high service reservoir, \$10,360.37; meters, \$2,954.74; completion of Venturi meter system, \$3,475.40; Real estate at Antietam Lake supply, \$19,330.80; core wall in Bernhart dam breast, excavating and ditching, \$7,902.48; new mains, gates and fire hydrants for distribution system, \$11,445.63; stone steps and other improvements at Penn street reservoir grounds, \$1,378.48. There was expended for maintaining distribution system, \$4,539.43; maintaining gravity supplies, \$5,998.05; maintaining Maidencreek supply, \$7,741.57; general maintenance, such as salaries, printing, stationary, horses, etc., \$13,089.60, while the interest and sinking fund took \$34,259.87.

The debt statement will be found in the report of the Superintendent, as taken from the books of the City Controller. The net water debt at the close of the fiscal year was \$494,730.00.

## ANTIETAM LAKE SUPPLY.

There was a plentiful supply of water from this source throughout the year. By way of experiment the Superintendent allowed the water stored in this Lake to be consumed during the hot months until nearly empty, believing that with the water at a decreasing or varying depth the growth of Algae would to a large extent be prevented and with it the prevention of the fishy taste occasionally arising in this water. After the hot months had passed the Lake was allowed to fill with fresh water. The result seemed satisfactory, as no complaints were heard during this time of bad tasted water from this

source. Another trial of this will be made the coming summer. Possession of the Hinnershitz Mill property, the Faust, Wentzel and Schilt properties was secured in July, 1896, together with a small area from Frank Fick, adjoining the Faust tract ; also a small area from Jonathan Seidel, adjoining the Hinnershitz tract, both of which had their boundaries in the mill dam partly owned by the department. Valentine Hartman also owns a 5-acre tract centering in this dam. We are unable to agree with him upon a price, and your honorable bodies will be asked to authorize the necessary bonding of the property. The failure to secure this tract has delayed intended improvements. A tract of 22 acres lying between the Hinnershitz mill property and the lake has been secured and possession will be given in July, 1897. This tract is a most valuable one and will complete the ownership of the land which has caused the most serious and direct pollution, and which is necessary to make contemplated improvements to protect the water. The cause of pollution on all these lands was removed before January 1, 1896, and it is with pleasure we can report that the condition of the water since that time has been vastly improved, no sickness having been traced to this source during the past year. It is certain that within a few years all dangerous contamination of this water will be prevented. We, therefore, still adhere to the opinion expressed in our report of last year concerning the filtration of the water of this supply.

#### BERNHART DAM.

The strengthening of the breast of this dam and the stoppage of a serious leak was begun by the construction of a brick and cement core wall through it, but the work had to be discontinued when three-fourth completed, by reason of a shortage in the cash account of the department, the controller refusing, even in the emergency, to allow the discount to be paid on temporary loans, which prevented the completion of the work, and the removal of the growth of weeds, etc., in the bottom of the reservoir, which developed while empty ; the water had to be turned on top of these weeds, with the result that during the winter the water became offensive from the decaying weeds, much to the disgust of the consumers. The further extension of this core wall will be completed during the coming year.

#### HAMPDEN RESERVOIR.

No material expense has been added to this property. The sidewalk along the Pricetown road facing the grounds has been

graded. As the roadway needs to be graded, we could not place our curbs and pave as was the intention. Your honorable bodies will please have the street graded, so that our improvements can be completed.

#### EGELMAN DAM.

No improvements of any note were made to this property. It is in good condition and furnished a plentiful supply.

#### BUTTONWOOD STREET HIGH SERVICE RESERVOIR.

This improvement was completed during the year and was taken off the contractor's hands, Sept. 22d, 1896, upon the written recommendation and report of City Engineer Chamberlain (engineer in charge), that it was constructed according to plans and specifications. It soon thereafter became evident that it would not hold water. Various reasons were given. The most potent, however, appears to be that concrete lining allows too much seepage and cannot be made without shrinkage, which causes small cracks, and therefore is not suitable for reservoir lining, unless backed with a good clay puddle lining. This the engineer in designing the reservoir did not provide for. Had this been done, it is our opinion that it would today hold water. With a view to prevent seepage a coat of Alcatraz liquid asphalt was put on the concrete, without any good results. In addition to the smaller cracks, due to contraction, a large one has been caused by the settling of a portion of the front embankment. This must be closed up, and some plan for making it water-tight will be put into effect during the year.

#### PENN STREET RESERVOIRS.

The grounds surrounding these reservoirs have been made as attractive as possible by floral decorations, thereby affording a delightful place for recreation. The appreciation of our efforts is heard from many.

#### MAIDENCREEK PUMPING STATION.

The report of the Superintendent will give you full information pertaining to the operation of this plant. The property is in excellent order. During the year one of the joints on the force main passing through the grounds was forced out, and a serious leak undermining the house occupied by the assistant engineer made it necessary to move the building 75 feet further east. The improvements made during the year add much to

the attractiveness of this property. Our citizens can find it a pleasant place for a day's recreation. The P. S. V. R. Co. will stop accommodation trains for parties of 5 or more people at the plant.

#### DISTRIBUTION SYSTEM.

The report of the Superintendent will show the work done during the year. Many changes in valves and hydrants have been made, dead ends connected and general repairs throughout the system. 8,677 feet of new mains were laid and 13 new fire hydrants added. 435 new main taps were granted, a decrease of 65. Permits for 1,967 private services were issued, a decrease of 180. The use of meters is still growing, the increase being 63. The total consumption by meters was 401,424,152 gallons, an increase of 2,159,676 gallons; and the average rate received per thousand gallons \$0.0424. The venturi meter service was in operation during the year, and the daily consumption of the city registered. The highest consumption occurred on July 20, and reached 7,883,000 gallons, while the lowest was on April 5th, 4,141,000 gallons. Average daily consumption to be 6,020,431 gallons. The per capita consumption being 82.5 gallons daily.

We desire to call your special attention to the following new features in the report of the Superintendent, giving data not heretofore recorded, viz.: Table of different sizes of distribution pipe, showing location; table showing the pressure at each fire hydrant, number of outlets and size of main pipe; summary of statistics: tables showing amount of water received from each source, and cost of furnishing the water from the different sources; plates showing the daily consumption, rainfall and height of Maiden creek.

All of the above afford a basis for future study and will aid in ascertaining where and how expense of operation may be saved, and bring before the eye facts which will prove of value in the practical working of the system.

The annual meeting of the American Water Works Association, held at Indianapolis, Ind., on May 28th, 1896, was attended by Messrs. Harbster, Heller and Felix, of the Board, and Superintendent Nuebling, and proved a very interesting meeting.

In closing we wish to express our appreciation of the considerate and willing support your honorable bodies have given our recommendations during the year; also his honor, the Mayor, for his approval of all measures emanating from the

Board. To the Superintendent, Clerks, and other employees.  
we tender our approval of their official acts during the year.

Respectfully submitted,

GEO. H. FELIX,  
M. HARBSTER,  
FRANK A. TYSON,  
F. P. HELLER,

*Commissioners of Water..*

Reading, Pa., May 27th, 1897.



ANNUAL REPORT  
OF THE  
SUPERINTENDENT AND ENGINEER OF THE WATER DEPARTMENT  
To the Board of Water Commissioners of the City  
of Reading, Pa., for 1896-'97.

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*To the Honorable Board of Water Commissioners of the City of Reading, Pa.:*

GENTLEMEN :

In compliance with the resolution of your Board, approved April 30th, 1895, requiring the Superintendent and Engineer to prepare and submit annually a report in detail of the operations of your system of water works, and to include such statistical and technical information as will be of use and benefit to the department, I take pleasure in submitting this, my second annual report, being for the fiscal year beginning April 6th, 1896, and ending April 5th, 1897.

The report referring to operations and improvements made, or to be made, will be dwelt upon under the titles of the different sources of supply.

#### ANTIETAM LAKE SUPPLY.

A different policy has been adopted this year in the use of the water from this source. Instead of keeping a good supply of water on hand during the hot summer months, the entire storage was distributed to September 15th, 1896, at which date the lake was practically empty. After the above date East Reading alone was supplied from this source until Oct. 22d., 1896, when the entire supply was again turned into the distribution system.

At no time during the year have we received any complaint on account of bad taste or odor from the water of this source.

An exchange of property with Franklin Fick has been made, and a small tract purchased from Jonathan Seidel. By the above exchange and purchase the department has come into control of additional parts of the Hinnershitz mill dam.

Minor improvements have been made on the Antietam properties, amounting to \$872.60. The maintainance of this supply has cost the department \$842.38.

## HAMPDEN RESERVOIR.

On July 3d, 1896 two large holes were discovered in the bottom of this reservoir, making it necessary to empty it. The leaks were repaired promptly with good clay puddle.

During the short time that the reservoir was out of service, the high points of the intermediate service were without water, due to the deficient size of the Antietam supply main, and the lack of a direct connection between the pumping main and the distribution system. This occurrence caused considerable complaint on the part of the consumers. The screen at the bottom of the screen chamber is torn and should be replaced with duplicate removable screens, so that one set could be taken out and cleaned, while the other set remained in position. The improvements consist of the grading of the sidewalk on Price-town road, and the building of a weir at the Maiden creek inlet. A test was made at the weir to ascertain the amount of slip of the pumping engines. The result of the tests indicated that but 90 per cent. of the theoretical discharge of the pumps was received at the reservoir. This deficiency could not be charged entirely to the pumps, as it was known that more or less water was leaking through the joints of the pumping main, and as this leakage cannot be definitely measured until the direct connection with the distribution system is made, we were not able to tell what amount of the 10 per cent. deficiency was chargeable to the pumps, and have therefore used the theoretical discharge in the calculations entering into this report.

The cost of improvements was \$511.81, and of maintainance \$1,191.18.

## BERNHART DAM.

A cement masonry core wall has been built for two thirds of the length of the dam breast, to several feet below the bottom of the dam. This improvement was necessary owing to the bad condition of the earth embankment, and should be extended this coming season to embrace the entire breast. The cost of this improvement and the draining and cleaning of the pond on the property recently acquired of F. P. Heller, amounted to \$7,902.48.

The maintenance of this supply has cost the department \$796.06, which amount includes the salary of watchman, cleaning of mud dam and other sundry repairs and expenses.

During the construction of the core wall, the water was necessarily allowed to remain at a shallow depth, and in consequence a vigorous growth of vegetation had sprung up on the exposed bottom of the dam. We were compelled to allow this

growth to remain on account of the low condition of the treasury at the time, and the antipathy of certain officials for making temporary loans. It is certainly deplorable that this work could not go on, since the decaying vegetation will cause the water to taste bad during the coming season ; in fact complaints are being received at the present time about bad odors from the water of this supply.

#### PENN STREET RESERVOIRS.

The usual abundant growth of vegetation in these reservoirs was not noticeable during the year, neither was any very bad odor detected during the hot weather ; but in place of the usual willow-like vegetation, a greenish-yellow scum formed on the surface of the water.

The principal improvement made on this property was the building of stone steps at the Eleventh and Penn streets entrance. The total cost of improvements was \$1,378.48. The maintenance of these grounds and reservoirs includes the usual salaries of watchman, floral decorations and minor expenses, amounting to \$2,296.44.

#### EGELMAN DAM.

The building of drains through marshy places has been continued during the year by the watchman, and a number of trees have also been planted by him.

The cost of improvements has been \$110.00, and of maintenance \$365.90.

#### BUTTONWOOD STREET RESERVOIR.

On September 22, 1896, your Board had accepted this reservoir from the contractor, upon the recommendation of the City Engineer, who had charge of the construction. The concrete lining of the reservoir, although apparently well done, is unable to hold water. The sides of the reservoir were coated with a thin layer of liquid asphaltum, but this did not prevent the reservoir from leaking badly. I would suggest that a thick layer of asphaltum be placed on the slopes of the reservoir, and protected from the heat by some paving material, preferably bricks.

#### MAIDENCREEK SUPPLY.

During the early spring freshets of 1896 it became evident that in order to maintain the roadway and walk on the north of the pumping station, it would be necessary to pave the same, as the high water had washed out about one foot in depth of

the macadam roadway. Your Board have therefore wisely decided that the roadway should be paved to ordinary high water mark with a durable pavement on a good foundation. This work was done at a cost of \$1,672.58. The flat north of the pumping station was sodded, and some extensive improvements made to the dwellings of engineer and fireman. The above and other minor improvements about the station and along the pumping main were made at the cost of \$2,128.25.

During 1896-7 there were 109,450,813 less gallons of water pumped than during the previous year. This difference certainly speaks well for introduction of meters, and for the methods in use in taking advantage of the storage of water in the supply dams.

Comparing the amount of water pumped during 1896-97 with previous years, it will show that 249,917,375 less gallons were pumped than during 1894-95, and that 536,893,769 less gallons were pumped than during 1893-94, also that 120,287,929 less gallons were pumped than during 1892-93.

The total cost of operating the pumping plant for the fiscal year was \$7,741.57. Adding to this cost of operating the interest on the cost of the pumping plant and main, taken at 4 per cent., on \$257,630.49, amounting to \$10,305.22, we get \$18,046.79 as the total cost of raising 538,254,791 gallons of water to the Hampden distributing reservoir. This would make the cost of water at the reservoir  $3\frac{3}{8}$  cents per 1,000 gallons, or  $\frac{7}{8}$  of a cent more per 1,000 gallons than it cost last fiscal year.

This increase is due to the increased interest charge, on account of the improvements made during the year, also to the fact that there were less gallons of water pumped than last year. The salaries of engineer and fireman, and other fixed charges, being the same whether the pumps are running or not.

#### DISTRIBUTION SYSTEM.

The cost of the distribution system has been increased \$19,592.71, including the cost of new meters and the completion of the Venturi meter system.

8,677 feet of new mains have been laid during the year, and 13 additional fire hydrants placed.

All new fire hydrants have been placed on the north or west sides of streets, wherever practicable, to reduce the liability of freezing. Gates have been placed on all hydrant connections put in during the year.

All meters have been tested previous to placing of the same. A record of these tests will be seen in statement "K." By referring to this table it will be seen that no meter that had been set had a greater error than 2½ per cent.

The results of these records should remove any doubt that the consumer might have as to the general accuracy of the water meters.

The cost of maintaining the distribution system has been \$4,758.46. For an itemized cost see statement "C." We repaired 79 leaks on main pipe lines, replaced 30 old fire hydrants with new ones, and repaired 39 fire hydrants.

It seems imperative that the 24-inch direct pumping main should be laid on Thirteenth street between Marion and Robeson streets in the near future, as there is no method of supplying the intermediate service from the Maidencreek supply without relying on the Hampden reservoir, and whenever it becomes necessary to make repairs to the Hampden reservoir, parts of the intermediate service will be without water, unless the above Thirteenth street main is laid.

The above condition occurred on the afternoon and evening of July 3, 1896.

I especially desire to call your attention to the need of better fire protection and domestic service along the East Reading hill sides. This district can be relieved by extending the high service from Hill road across Rose valley to the Neversink hill. This work should be done early this coming season.

Numerous dead ends have been removed along the dividing line between the intermediate and low services. This work should be continued until the entire work is completed.

#### VENTURI METERS.

In the beginning of the year the meters were put into operation, and have been registering the amount of water flowing into the distribution system and the distributing reservoirs from the sources of supply. Readings are taken every morning and evening at 6 o'clock, to determine the day and night consumption. The meters have been very useful in other directions than that of determining the amount of water supplied, as through their records we were able to determine that some of the gates had been left closed by the employees on two of the large mains. We have experienced some trouble with the electrical driving mechanism, and I would suggest that the registers be exchanged for registers driven by weights. The registers should also be connected with the office, so that any

fluctuations of flow can readily be seen, and the defects of the supply mains remedied promptly whenever occasion requires it.

Through the use of these meters we were able to furnish valuable data as to consumption and supplies, which will be found throughout the report.

#### CONSUMPTION.

The total amount of water supplied to the distributing reservoirs from the several sources is 2,204,742,987 gallons. It has cost the department, in total amount expended for maintenance, including interest charges, the sum of \$65,628.52 for supplying the above amount of water, or at an average rate of 2 1/2 cents per 1,000 gallons.

By adding to the usual maintenance of each supply the proportionate amounts of general maintenance, taken at their respective per cents. of the total amount of water supplied, according to statement "B," we get the cost per 1,000 gallons of water from the different sources, according to the following table.

Supplies.	Maintenance.	Proportion of General Maintenance.	Amount of Proportioned General Maintenance.	Total Maintenance Charge.	Cost per 1,000 Gallons.
Antietam.....	\$ 842 38	43.7 per ct.	\$24,394 48	\$25,236 86	\$0 0262
Bernhart.....	796 06	28.2 per ct.	15,741 98	16,538 04	0 0266
Maidencreek.....	7741 57	24.4 per ct.	13,620 72	21,362 29	0 0397
Egelman.....	365 90	2.4 per ct.	1,339 74	1,705 64	0 0320
Hampden Springs	50 00	1.0 per ct.	558 22	608 22	0 0272
Hampden Drift.....	10 00	.3 per ct.	167 47	177 47	0 0304
Totals.....	\$9805 91	100 per ct.	\$55,822 61	\$65,628 52	\$0 0298

In conclusion I wish to express my thanks to the members of the Board, to the Clerks of the department and to the Assistant Superintendent for their assistance, courtesy and good advice during the past year.

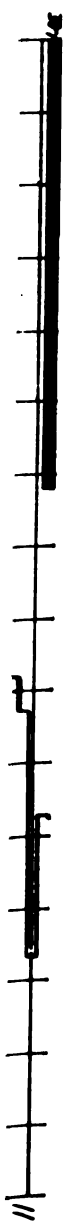
Very respectfully submitted,

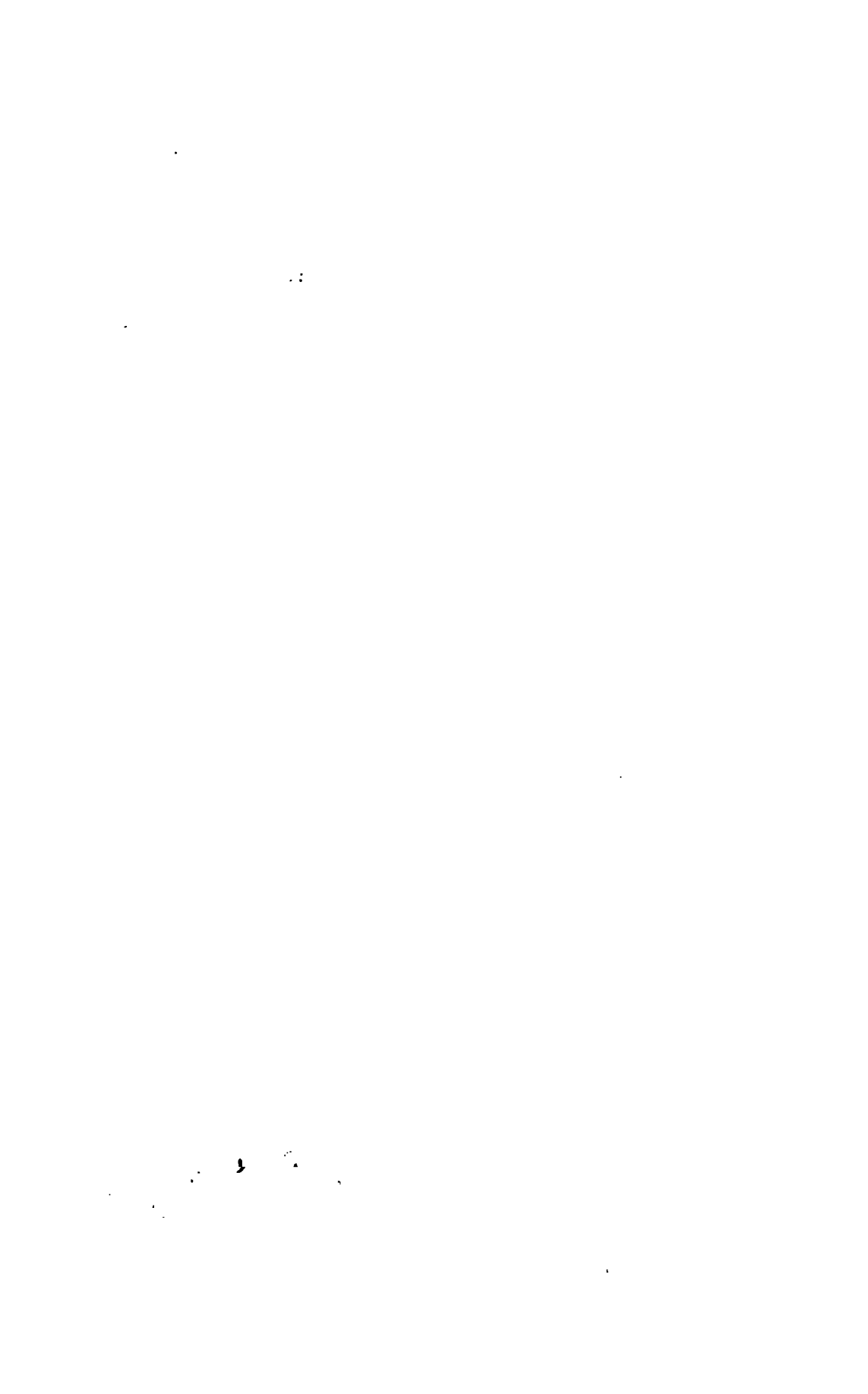
EMIL L. NUEBLING,  
*Superintendent and Engineer.*

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# APPENDIX

## TO

### Report of Superintendent and Engineer of Water Department, 1896-'97.

STATEMENT "A."—Showing grand total net cost of the water works system to date, together with the cost of each source of supply.

STATEMENT "B."—A detail statement of the water debt and sinking fund, as per report of the City Controller.

STATEMENT "C."—Giving a general and detail account of the receipts and expenditures; also appropriations, amounts expended and balances merged.

STATEMENT "D."—Schedule of all bills paid by Department during fiscal year, to whom paid and amounts.

STATEMENT "E."—Showing property owned by the Water Department.

STATEMENT "F."—Comparative statement showing revenue from each of the several sources for each year since 1865, also showing the number of feet of pipe laid in those years.

STATEMENT "G."—Showing size, location and length of pipe laid during fiscal year, giving itemized cost of same.

STATEMENT "H."—Showing the location and size of all pipes in use on the 5th day of April, 1897, also pipe lines abandoned.

STATEMENT "I."—Showing number, location, make, etc., of all fire hydrants throughout the City on April 5th, 1897.

STATEMENT "J."—Report of the operations at Maiden Creek Pumping Station.

STATEMENT "K."—Giving results of tests made of the per cent. of error in meters set or reset during year.

STATEMENT "L."—Table showing rainfall for 17 years, 1880-1896.

STATEMENT "M."—Showing weights and dimensions of "Flange" cast iron water pipes in use by the Water Department.

STATEMENT "N."—Showing amount of stock on hand used for repairs, and maintenance and construction.

STATEMENT "O."—Schedule of water rates in effect April 1st, 1897.

STATEMENT "P."—Giving statistics as suggested by the New England Water Works Association.

STATEMENT "Q."—Report of City Engineer and Superintendent and Engineer of the Water Department, on a new pumping main from the Maidencreek Pumping Station.

STATEMENT "R."—Revised statement showing the capacity of the water works system, also amount of water received from each source.

PLATE 1.—Showing daily consumption of water, in comparison with the daily rainfall.

PLATE 2.—Showing daily height of Maidencreek in comparison with the daily rainfall.

PLATE 3.—Plan of routes surveyed for a new pumping main to accompany statement "Q."

## STATEMENT "A."

Showing grand total net cost of the water works system to date, together with the cost of each surce of supply.

Grand total net cost of the water works system from date of purchase, in 1865, to April 6, 1896, as per last year's report, page 37	\$ 1,625,105 33
Expended during 1896-1897 in permanent improvements and extensions according to statement "C".....	\$ 63,916 39
Less amount received for frontage tax and corporation cocks.....	4,419 95
	<u>59,496 44</u>
Total net cost of water works system April 5, 1897.....	\$ 1,684,601 77

## COST OF EACH SUPPLY.

Bernhart dam to April, 1896.....	\$ 124,552 70
Permanent improvements, 1896-97..	7,902 48
	<u>\$ 132,455 18</u>
Egelman dam to April, 1896.....	6,847 20
Permanent improvements, 1896-97..	110 00
	<u>6,957 20</u>
Antietam Lake to April, 1896.....	298,329 34
Permanent improvemants, 1896-97..	20,203 40
	<u>318,532 74</u>
Hampden reservoir to April, 1896..	153,717 91
Permanent improvements, 1896-97..	511 81
	<u>154,229 72</u>
Maidencreek supply to April, 1896	253,829 66
Permanent improvements, 1896-97 .	3,800 83
	<u>257,630 49</u>
Penn street reservoirs to April, 1896	50,564 64
Permanent improvements, 1896-97..	1,378 48
	<u>51,943 12</u>
Buttonwood street reservoir to April 1896 .....	14,696 01
Permanent improvements, 1896-97..	10,360 37
	<u>25,056 38</u>
Venturi meters and appurtenances to April, 1896.....	3,145 73
Permanent improvements, 1896-97..	3,475 40
	<u>6,621 13</u>

Distribution system to April, 1896..	\$348,878 43	
Permanent improvements, 1896-97..	13,162 57	
	<u>362,041 00</u>	
Less amount received for frontage tax and corporation cocks.....	4,419 95	\$357,621 05
Meters to April, 1896.....	14,277 03	
Addition in 1896-97.....	<u>2,954 74</u>	
		17,231 77
Filtration investigations.....		56 31
Laurel Run extension (abandoned)..		36,235 88
Mineral Spring property.....		20,030 80
Original cost of plant in 1865.....		<u>300,000 00</u>
Total net cost April 5, 1897.....		\$1,684,601 77

### STATEMENT "B."

A detail statement of the Water Debt and Sinking Fund, as per report of the City Controller.

#### WATER DEPARTMENT DEBT, APRIL 5, 1897.

##### Interest bearing debt :

Rate.	Issued.	Redeem- able.	Payable.	
4 per cent.....	Feb. 1, 1889	Jan. 1, 1904	Jan. 1, 1919	\$125,000 00
4 per cent.....	Jan. 2, 1890	Jan. 1, 1900	Jan. 1, 1900	57,500 00
4 per cent.....	Jan. 9, 1890	July 1, 1920	July 1, 1920	200,000 00
4 per cent.....	Jan. 1, 1892	Jan. 1, 1902	Jan. 2, 1902	75,000 00
4 per cent.....	Jan. 1, 1892	Jan. 1, 1907	Jan. 2, 1912	75,000 00
Total interest bearing debt.....				\$532,500 00
Bonds in Sinking Fund :				
4 per cent's (city) payable April 1, 1913.....				\$19,000 00

##### WATER SINKING FUND.

Cash in fund April 6, 1896.....	\$11,210 00	
Apr. 29, 1896.—Interest on \$19,000: 4 per cent. re- funding bonds, 6 months.....	380 00	
Jan. 4, 1897.—Interest on \$19,000: 4 per cent. re- funding bonds, 6 months.....	380 00	
Jan. 7, 1897.—Amount received from water rents..	<u>7,500 00</u>	
		19,470 00
		<u>\$38,470 00</u>
May 15, 1896.—By payment of outstanding funded water debt bond, No. 27.....	500 00	
July 18, 1896.—By payment of outstanding funded water debt bond, No. 30.....	100 00	
Nov. 24, 1896.—By payment of outstanding funded water debt bond, No. 27.....	<u>100 00</u>	
		700 00
Cash and bonds in fund April 5, 1897.....		37,770 00
Actual net debt of Water Department, April 5, 1897.....		<u>\$494,730 00</u>

## STATEMENT "C."

Giving a general and detail account of the receipts and expenditures, also appropriations, amounts expended and balances merged.

Henry G. Young, Receiver of Water Rents, in Account with the City of Reading.

## DR.

April 6, 1896. To balance on hand.....	\$ 6,244 61	
April 5, 1897. Receipts from all sources.....	131,446 25	
	<u>          </u>	\$137,690 86

## CR.

April 5, 1897. By payment of warrants and coupons.....	\$ 128,483 98	
April 5, 1897. By balance on hand.....	9,206 88	
	<u>          </u>	\$137,690 86

Detail Account of Receipts for Year Ending April 5, 1897, from Report of City Controller.

Water rents.....	\$ 125,303 21	
Miscellaneous.....	507 46	
Rent from real estate.....	141 00	
Frontage tax.....	2,786 01	
Liens collected by City Solicitor, Rents.....	\$611 10	
Frontage tax.....	378 62	
	<u>          </u>	989 72
Ferrules or corporation cocks.....	1,255 32	
Penalties.....	448 53	
Fines for violation of rules.....	15 00	
	<u>          </u>	\$131,446 25

Detail Account of Expenditures for the Year Ending April 5, 1897, from the Accounts of the Superintendent and Engineer.

## CONSTRUCTION.

New mains and accessories as per statement C...		\$10,070 85
New fire hydrants not included in the above accessories or in fire hydrants replaced.		
Labor.....	\$ 207 60	
Fifteen hydrants.....	429 00	
Fourteen 6-inch gates.....	161 00	
One 4-inch gate.....	7 50	
Pipe.....	59 09	
Gate Boxes.....	120 91	
Specials.....	177 15	
Lead and oakum.....	22 24	
Miscellaneous.....	4 06	
	<u>          </u>	1,188 55

**NEW GATES.**

Labor.....	\$40 95
5 gates.....	86 75
Pipe.....	7 16
Specials.....	18 86
Gate boxes.....	18 16
Lead and oakum.....	12 70
Miscellaneous.....	1 65

\$186 23

**PENN STREET RESERVOIR IMPROVEMENTS:**

Gauge boards.....	20 84
Stone steps.....	1,279 99
Blue print frame.....	77 65

1,378 48

**HAMPDEN RESERVOIR IMPROVEMENTS:**

Weir on Maiden creek inlet.....	28 19
Grading and making walk, Pricetown road...	483 62

511 81

**ANTIETAM LAKE IMPROVEMENTS:**

Surveys for settling basins, additional proper- ties purchased, planting monuments, etc....	420 53
Building new fences.....	352 29
Lift pump and improvements to watchman's house.....	99 78

872 60

**BERNHART IMPROVEMENTS:**

Cleaning and ditching mud hole on property purchased from F. P. Heller.....	345 89
Building core wall in dam breast.....	7,556 59

7,902 48

**MAIDENCREEK PUMPING STATION IMPROVEMENTS:**

New pump.....	22 94
Sodding and grading.....	479 95
Work and material on pavilion.....	6 48
Tie rails, hitching posts and grape arbor.....	47 53
Building and fixtures for bath rooms.....	350 11
Balance on inlet and wall.....	269 00
Extension to wall along creek.....	52 41
Building and paving drives.....	1,672 58
Erecting heaters and fittings for steam heat...	507 35

3,408 35

**IMPROVEMENTS TO PUMPING MAIN:**

Balance on new gates.....	336 82
New pumping main.....	55 66

392 48

**BUTTONWOOD STREET RESERVOIR IMPROVEMENTS:**

Gauge board.....	7 85
Paving and draining walks, grading, laying sprinkler pipes, sodding, etc.....	6,360 56
Balance of construction on original contract...	3,991 96

10,360 37

**EGELMAN DAM IMPROVEMENTS:**

Constructing drains and planting trees.....	110 00
New meters.....	2,954 74
Corporation cocks and attachments.....	1,210 79

**VENTURI METERS, EGELMAN :**

Balance on register house.....	\$168 02	
Meter and register .....	687 50	
Battery box, oil stove and oil tank.....	18 00	
		<u>\$873 52</u>

**VENTURI METER, HAMPDEN :**

Balance on register house.....	235 56	
Meter and register.....	550 00	
Connecting register.....	1 82	
Battery box, oil stove and oil tank.....	18 00	
		<u>805 38</u>

**VENTURI METER, BERNHART :**

Balance on register house.....	185 00	
Balance on register and meter.....	400 00	
Grading.....	8 75	
Battery box and oil tank.....	9 50	
		<u>603 25</u>

**VENTURI METER, ANTIETAM :**

Balance on register house.....	196 90	
Meter and register.....	965 00	
Grading.....	18 85	
Deeds for land purchased.....	3 00	
Battery box and oil tank.....	9 50	
		<u>1,193 25</u>

**REAL ESTATE PURCHASED :**

At Antietam Lake.....	19,330 80
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**IMPROVEMENTS TO DISTRIBUTION SYSTEM :**

Arranging gates and connections between intermediate and low services to abolish dead ends.....	506 15
Filtration investigations.....	56 31
	<u>563 46</u>

Total amount expended on improvements.....	<u>\$63,916 39</u>
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**MAINTENANCE.****VENTURI METER, EGELMAN :**

Repairs to meter and register.....	11 53	
Supplies.....	15 25	
Reading register.....	43 00	
		<u>69 78</u>

**VENTURI METER, HAMPDEN :**

Repairs to register and connections.....	5 90	
Supplies.....	15 27	
		<u>21 17</u>

**VENTURI METER, BERNHART :**

Repairs to register.....	16 40	
Supplies.....	17 51	
Reading register.....	14 55	
		<u>48 46</u>

**VENTURI METER, ANTIETAM :**

Repairs to register.....	8 10	
Supplies.....	16 52	
Reading register.....	55 00	
		<u>79 62</u>
Repairs to water meters.....		<u>161 20</u>

**MAINTAINING GATES AND BOXES:**

Repairs to gates .....	\$665 81	
Repairs to boxes.....	267 05	
Raising and Lowering boxes.....	41 59	
	<hr/>	\$974 45

**FIRE HYDRANTS, REPAIRS TO:**

Repairing 39 fire hydrants.....		158 67
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**FIRE HYDRANTS REMOVED AND REPLACED:**

Replacing 30 old hydrants with new.....	2,553 02	
Removing 8 old hydrants not replaced.....	45 81	
	<hr/>	2,598 83

**LEAKS ON PIPE LINES:**

City mains, number repaired, 53.....	288 40	
Bernhart mains, number repaired, 4.....	29 08	
Hampden Spring pipe, number repaired, 1.....	18 70	
Egelman main, number repaired, 1.....	1 30	
Repairing damage Keim's wall and putting in new attachment on account of leaks on main .....	308 80	
	<hr/>	646 28

Total cost of maintaining distribution system.... \$4,758 46

**EGELMAN DAM MAINTENANCE:**

Watchman and general work on grounds.....		365 90
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**ANTIETAM MAINTENANCE:**

Watchman's salary.....	360 00	
Repairs to fences.....	147 64	
Whitewashing.....	32 83	
Cutting and clearing brush.....	171 98	
Telephone rental.....	63 13	
Insurance.....	31 20	
General repairs.....	35 60	
	<hr/>	842 38

**BERNHART DAM MAINTENANCE:**

Watchman.....	259 82	
Telephone rental.....	56 99	
Cleaning and repairing mud dam.....	251 52	
Cutting and Cleaning brush.....	41 56	
General repairs and overflow damages.....	10 50	
Rebuilding and repairing fences....	176 07	
	<hr/>	796 06

**HAMPDEN RESERVOIR MAINTENANCE:**

Watchman.....	420 00	
Gauge board and sign boards.....	9 25	
Care of grounds.....	661 40	
Repairs to buildings.....	60 14	
Whitewashing.....	9 77	
Repairing leak.....	8 75	
General repairs.....	14 60	
Repairs to sprinkler pipes.....	7 27	
	<hr/>	1,191 18



**PENN STREET RESERVOIR MAINTENANCE:**

Watchmen and uniforms.....	\$812 85	
Repairs to Superintendent's residence.....	101 11	
Repairs to sprinkler pipes.....	4 34	
Whitewashing.....	28 15	
Arc light.....	113 75	
Floral decorations.....	779 75	
Work on grounds.....	376 49	
New benches.....	80 00	
		<b>\$2,296 44</b>

**MAINTAINING MAIDENCREEK PUMPING STATION AND GROUNDS:**

Salaries.....	1,495 00	
Labor at Pumping Station.....	307 65	
Labor on grounds.....	915 24	
1,668,000 lbs. coal.....	1,864 16	
Packing, Rubber Discs and Washers.....	176 03	
305 gallons Cylinder Oil.....	146 70	
205 1/2 gallons Illuminating Oil.....	18 33	
359 lbs. grease.....	49 35	
Sundry supplies.....	208 50	
Repairs to machinery.....	267 66	
Moving and repairing fireman's dwelling.....	656 47	
Painting and papering pumping station and dwellings.....	574 75	
Miscellaneous expenses.....	821 50	
Testing for and repairing 20 leaks.....	240 23	
		<b>7,741 57</b>

**BUTTONWOOD ST. RESERVOIR MAINTENANCE:**

Watchman and labor.....	152 35	
Manure.....	99 59	
Sundries.....	35 12	
		<b>287 06</b>

**GENERAL MAINTENANCE:**

Salaries of Superintendent, Assistant Superintendent, Draughtsman, Chief Clerk, Assistant Clerk, Secretary, Receiver of water rents, 2 Inspectors, General Foreman and Engineer.....	7,875 00	
Stationery, Superintendent.....	146 83	
Stationery, other officials.....	416 47	
Annual Report, balance on 1894-'95.....	245 25	
Annual Report, 1895-'96.....	636 85	
Advertising.....	211 45	
Livery hire.....	72 00	
Maintaining horses and wagons.....	713 45	
General repair work.....	359 29	
General hauling.....	499 38	
Miscellaneous expenses.....	1,865 42	
Prevention of Pollutions.....	48 21	
		<b>12,894 44</b>

State Tax on debt.....	2,111 36
County, school and road tax.....	274 30
Sinking fund.....	7,464 21
A. K. Stauffer's connection.....	7 26

Money appropriated for park purposes, also repairs made at Mineral Springs.....	\$2,610 00
Material sold and work done on credit.....	507 77
Coupons.....	21,288 00

## SUMMARY.

Construction.....	\$63,916 39
Maintaining distribution system.....	4,539 43
Maintaining gravity supplies.....	5,998 05
Maintaining Maidencreek supply.....	7,741 57
General maintenance.....	13,089 60
Coupons, sinking fund, etc.....	34,259 87
Total expenditures 1896-1897.....	<hr/> \$129,544 91
Material taken from stock in excess of additions to same.....	1,060 93
Balance expended by warrants according to City Controller's report.....	<hr/> \$128,483 98

## APPROPRIATIONS, EXPENDED AND BALANCES MERGING.

APPROPRIATIONS.	Amount Appropri- ated.	Amount Counter- signed.	Amount Trans- ferred.	Balance Merged.
Item 1. Salaries.....	\$10180 00	\$9,639 82	\$ 500 00	\$40 18
Item 2. Operating Maidencreek...	8,200 00	8,143 90		56 10
Item 3. Repairs and maintenance	18,580 00	18,177 25	196 35	206 40
Item 4. Labor, material, &c., for new mains.....	12,000 00	10,764 28	1,000 00	235 72
Item 5. Improvements to distri- bution system.....	2,284 29	684 29	1,600 00	
Item 6. Taxes, Insurance, repairs and improvements to real estate..	3,002 54	3,002 54		
Item 7. Interest on debt.....	21,300 00	21,288 00		12 00
Item 8. Payment of outstanding coupons.....	500 00			500 00
Item 9. State tax on debt.....	2,130 00	2,011 96		118 04
Item 11. Maintaining horses and wagons, &c.....	800 00	622 14		177 86
Item 12. Printing, stationary and publishing annual report.....	1,550 00	1,518 55		31 45
Item 13. Reconstructing old mains	3,100 00	2,700 02		399 98
Item 14. Sinking Fund.....	7,500 00	7,500 00		
Item 15. Water meters and plac- ing same.....	2,500 00	2,148 12	300 00	51 88
Item 16. Repairs to meters.....	150 00	141 79		8 21
Item 17. Stone entrance to Penn street reservoir grounds.....	1,196 35	1,196 35		
Item 18. Court costs and contin- gent expenses.....	1,000 00	942 36		57 64
Item 19. Floral decorations Penn street reservoir.....	775 00	700 00		75 00
Item 21. Permanent im pro v e- ments to Antietam Lake.....	7,000 00	1,565 22	5,430 00	4 78
Item 22. Complete Buttonwood street reservoir.....	10,350 00	10,326 88		23 12
Item 23. Complete Venturi meter system.....	4,000 00	3,465 34		534 66
Item 24. Balance due on land purchased at Ohlinger water shed	23,900 00	18,658 70	4,252 54	988 76
Item 26. Improvements to grounds at Maidencreek.....	1,500 00	787 77	709 29	2 94
Item 27. Improvements to Mineral Spring park.....	2,500 00	2,500 00		

## ESTIMATED REVENUE FOR 1897-'98.

Balance on hand.....		\$9,206 88
Water Rents.....	\$125,000 00	
Frontage Tax.....	4,000 00	
Lien Accounts.....	1,000 00	
Corporation Cocks.....	900 00	
Penalties.....	500 00	
House Rents.....	200 00	
Miscellaneous.....	500 00	
		<hr/> 132,100 00
Total.....		<hr/> \$141,306 88

## STATEMENT "D."

SCHEDULE OF ALL BILLS PAID BY DEPARTMENT DURING  
FISCAL YEAR, TO WHOM PAID AND AMOUNTS.

## APRIL.

Harrison Hinnershitz.....	Purchase of property at Antietam..	\$1,000 00
Susanna DeTurk.....	Cancelling mortgage on above....	5,000 00
Emil L. Nuebling.....	Labor, Feb. 16th to March 31st....	301 64
Reading Telegram.....	Advertising.....	10 00
George H. Felix.....	Deeds, Schildt property.....	7 05
Chas. F. Heller.....	Binding annual report, 1894-'95...	245 25
Emil L. Nuebling.....	Labor, April 1st to 15th.....	513 10
Milford N. Ritter.....	Printing meter bills.....	9 50
Penna. R. R. Co.....	Freight.....	1 98
Stichter Hardware Co....	Grass seed.....	19 74
Herald Publishing Co....	Advertising.....	10 00
A. W. Glase.....	Livery hire.....	5 00
Howard E. Ahrens.....	Balance on inlets at Maiden creek..	269 00
Salaries.....		453 33
Interest on debt.....		10 00
	Total.....	<hr/> \$7,855 59

## STATEMENT "D."—Continued.

## MAY.

A. L. Frame.....	Estimate on account Buttonwood Street Reservoir.....	\$ 600 00
J. M. Mountz.....	Cleaning cesspool.....	14 00
E. L. Nuebling.....	Labor, April 16th to 30th.....	600 13
Shunk Planing Mill Co.....	Mill work.....	87 06
Keuffel & Esser.....	Tapes and draughting material.....	38 32
A. L. Frame.....	Estimate on account Buttonwood Street Reservoir.....	100 00
E. L. Nuebling.....	Labor, May 1st to 15th.....	782 76
Geo. H. Felix, Trustee.....	Discount on notes.....	290 00
Mutual Fire Ins. Co.....	Insurance on dwellings, Maiden-creek.....	12 60
Salaries.....		951 66
Interest on debt.....		10 00
Total.....		\$3,486 53

## JUNE.

National Meter Co. ....	Meter repairs.....	\$ 5 50
J. George Hintz.....	Draughting material.....	96
Diamond Compound Co.....	Boiler compound.....	39 55
DeB. R. Keim.....	Expense in rebuilding wall and terrace.....	116 69
Salaries.....		936 66
Total.....		\$1,099 36

## JULY.

Emil L. Nuebling.....	Labor, June 16th to 30th.....	\$ 890 68
Emil L. Nuebling.....	Mileage.....	20 00
A. L. Roth.....	Sand and lime.....	13 41
Reading Foundry Co.....	Pipe, specials and gate boxes.....	1,885 02
Reading Foundry Co.....	Pipe, specials and gate boxes.....	327 11
Reading Foundry Co.....	Pipe, specials and gate boxes.....	49 57
Thomas McGovern.....	Inspector, Buttonwood St. Res.....	22 60
E. L. Nuebling.....	Gas, toll, freight and lawn mower.....	11 16
Fred. Roland.....	Hats for watchmen.....	5 00
Hoskin & Giles.....	Fall planting and care of terraces.....	85 50
John G. Nuebling.....	Repairs to lawn sprinkler.....	4 05
Wetherhold Bros.....	Repairs to carriages.....	5 50
P. & R. R. Co.....	Freight on new meters.....	7 46
Reading Foundry Co.....	Pipe, specials and gate boxes.....	890 54
A. W. Glase.....	Livery hire.....	2 50
James W. Sponagle.....	Recording deeds.....	4 50
I. S. Fry.....	Hay, oats and corn.....	104 60

## STATEMENT "D."—Continued.

Douglass & Connard.....	Brass plugs and fittings.....	\$ 10 53
E. L. Nuebling.....	Mileage, freight and express.....	45 27
E. L. Nuebling.....	Labor, June 1st to 15th.....	1,029 83
Metropolitan Electric Co.	Arc light, Penn St. Reservoirs.....	8 75
Louis Richards.....	Repairs to Venturi meters.....	8 70
Reading Lime Co.....	Lime and sand.....	30 59
E. L. Nuebling.....	Postage.....	25 00
Jos. A. Allgaier.....	Insurance, Maiden creek Pumping Station .....	75 00
L. Kremp, Real Estate Agency .....	Insurance, Maiden creek dwellings	45 00
Jacob S. Livingood.....	Plumbing on city main leak.....	8 40
Mayer & Baier.....	Relaying pavement.....	10 50
James Hangen.....	Postage.....	10 00
Metropolitan Electric Co.	Arc light, Penn Street Reservoirs	8 75
Walter G. Roland.....	Ledger and stationery.....	33 85
Jno. Drexel, Jr.....	Plumbing.....	2 35
Wm. R. Eyrich.....	Driving horse.....	160 00
Henry Connard.....	Corporation cocks.....	38 75
Chas K. Griesemer.....	Slating.....	41 71
Milford N. Ritter.....	Printing.....	3 50
Henry R. Worthington.....	Templets used at Maiden creek.....	22 94
National Meter Co.....	2 inch Gem meter.....	45 00
F. Shunk Planing Mill Co.	Mill work.....	5 10
National Meter Co.....	Repairs to meters.....	5 25
J. George Hintz.....	Stationery .....	8 80
W. H. Boyd Co.....	2 city directories.....	6 00
Fire and Water.....	Advertising proposals.....	6 60
Wm. F. Remppis & Co.....	2 doz. park benches.....	80 00
Emil L. Nuebling.....	Gas and express.....	4 11
Metropolitan Electric Co.	Arc light, Penn St. Reservoirs.....	8 75
Metropolitan Electric Co.	Arc light, Penn St. Reservoirs.....	8 75
Tobias Schenk.....	Damages to carriage.....	20 00
Engineering News.....	Advertising for supplies.....	13 60
A. L. Frame.....	Estimate on account Buttonwood Street Reservoir.....	362 90
W. Rosenthal.....	Advertising and printing.....	44 00
Chas. E. Miller.....	Expenses on inspection, Sacony Creek .....	2 40
J. Knabb & Co.....	Advertising and printing.....	19 30
George Foos.....	On account register houses, Ven- turi meters.....	300 00
Reading Rubber Stamp Works.....	Rubber stamp for Treasurer.....	50
Wm. H. Dechant.....	Maps, surveys and long bolts.....	34 90
Jno. H. Obold.....	Hardware.....	1 50
Adam W. Schwartz.....	Feed.....	4 50
H. Mueller Manf'g Co.....	Two 4 branch goose necks.....	22 50
Thos. McGovern.....	Inspector, Buttonwood St. Res.....	29 60
E. D. Westcott.....	Printed Postal cards.....	3 50
Jno. H. Printz.....	Bricks.....	2 20
H. Mueller Manf'g Co.....	Corporation cocks.....	110 47
Reading Telegram.....	Advertising for supplies.....	5 00

## STATEMENT "D."—Continued.

Reading Elec. Const. Co.	Wiring and lights, Mineral Spring hotel	\$ 110 00
E. L. Nuebling	Gas, toll, express and telegrams	4 20
George Foos	Blue print frame and battery boxes	51 50
Bright & Lerch	Pig lead	147 88
A. L. Frame	Estimate on account Buttonwood Street Reservoir	459 08
E. L. Nuebling	Labor, May 16th to 31st	795 52
Albert R. Leeds	Water analyses	250 00
Henry Connard	Packing	101 01
Reading Foundry Co.	Pipe, specials and gate boxes	265 88
Reading Foundry Co.	Pipe, specials and gate boxes	259 97
Wm. H. Dechant	Surveys, additional properties Antietam	288 60
T. S. Buck	Dating stamp	1 38
Penna. Tel. Co.	Telephone rental	105 00
American Water Works Association	Annual dues	3 00
B. F. Owen & Co.	Printing	37 00
Jos. Shearer	Land damages Egelman line	100 00
A. L. Frame	Est. Buttonwood street reservoir	208 15
Rensselaer Manf'g Co.	Water Gates	256 25
Davies, Printz & Co.	4 smelting furnaces	34 00
Taenzer Bros.	Time books and ledger	27 50
Reading Lumber Co.	Lumber	10 44
Wm. B. Albright	Yard rent Pearl and Bingaman	120 00
Fire and Water	3 subscriptions	9 00
Jno. H. Rothermel, Att'y	Balance on Faust property	5,850 00
Henry S. Schildt	Purchase of Schildt farm	6,800 00
Chas. D. Miller	Coal for stable	4 50
E. L. Nuebling	Labor July 1st to 15th	565 47
Geo. H. Felix, Trustee	Discount on notes	40 00
Julia V. Rowe	Rebate on Water rent	32 50
E. M. Quackenbos	Expenses in abating pollutions	4 50
Chas. D. Miller	Bituminous coal	13 50
Merritt Bros	Lumber	47 00
Wm. Lorah	Fence posts	8 23
George Foos	Carpenter Work	95 20
Greth Machine Works	Pipe and fittings	22 80
Greth Machine Works	Pipes, fittings and machine work	5 40
Bard, Reber & Co.	Hardware	114 99
Gasser & Johnson	Mill work	43 46
Henry G. Young, Treas.	State tax on debt	2,011 66
Penna. Telephone Co.	Telephone rental	105 00
Jno. Drexel, Jr.	Plumbing	63 93
Milford N. Ritter	Frontage receipt books	8 50
A. W. Glase	Livery hire	5 00
Jno. H. Printz	Brick	27 00
D. C. Lutz	Hardware	59 64
W. M. Fulton	Limestone spalls	7 90
Greth Machine Works	Pipe and fittings	6 77
A. L. Roth	Lime, sand and cement	18 03
H. A. Brown	Repairs to service pipe	1 50

## STATEMENT "D."—Continued.

O. B. Coller.....	Hauling.....	\$ 1 80
Thos. Jackson & Son.....	Jute packing.....	21 15
Interest on debt.....		10,542 00
Salaries.....		936 66
	Total.....	\$38,243 60

## AUGUST.

Reading Foundry Co.....	Specials.....	\$ 59 63
Reading Foundry Co.....	Pipe, specials and gate boxes.....	188 01
Hoff & Bro.....	Hardware, Cement and grass seed.....	148 76
E. L. Nuebling.....	Labor July 16th to July 31st.....	779 71
Henry Connard.....	Gaskets.....	17 88
Herald Publishing Co.....	Advertising proposals.....	3 15
Henry Connard.....	Repairing fire hydrants.....	3 35
Dwight Seed Co.....	Lawn seed.....	5 75
Howard F. Boyer.....	Livery hire.....	6 00
John F. Boyer.....	Livery hire.....	5 00
Gittleman & Harbach.....	Painting and papering at Maiden-creek.....	61 44
David C. Lotz.....	Hardware.....	10 01
K. H. Cleaver.....	Veterinary service.....	10 25
Bright & Lerch.....	Pig lead.....	340 15
E. L. Nuebling.....	Gas, freight and stationery.....	6 62
Wm. McIlvain & Sons.....	Sheet steel.....	4 95
E. L. Lindemuth.....	Shearer agreement and recording.....	3 25
Jonas A. Montgomery.....	Painting.....	33 48
Wm. H. Weaver & Co.....	Scrap lead.....	32 50
R. Frank Roche.....	Sign boards.....	45 00
Penna. R. R. Co.....	Freight.....	1 16
Reading Telegram.....	Advertising water rents.....	6 25
A. L. Roth.....	Limie and sand.....	16 87
I. C. Fetter.....	Writing deeds.....	3 00
Abner S. Deysher.....	Lumber for picket fence.....	99 56
E. E. Hafer.....	Photograph copies for annual report.....	40 00
Garlock Packing Co.....	Packing.....	12 50
Reading Planing Mill Co.....	Mill work.....	5 30
Reading Evening World.....	Advertising water rents.....	6 00
N. T. Kunkle & Son.....	Oils.....	58 65
J. P. O'Reilly.....	Stone steps Penn street reservoir.....	1,196 35
E. L. Nuebling.....	Mileage, express and horse medicine.....	81 50
E. L. Nuebling.....	Labor August 1st to 15th.....	1,292 93
Roland Mearig.....	Repairs to dwelling, Bernhart.....	3 85
Hoskin & Giles.....	On account of fall planting.....	500 00
Merritt Bros.....	Lumber.....	33 60
Milford N Ritter.....	Printing.....	3 50
Reading Foundry Co.....	Specials, Pipe and gate boxes.....	764 24
Cleon Bechtel.....	Oil cans.....	4 80



## STATEMENT "D."—Continued.

N. T. Kunkle & Sons.....	Oils.....	\$ 25 70
National Bolt and Nut Works.....	Fittings .....	1 00
Interest on debt.....		128 00
Salaries.....		936 66
Total.....		\$6,986 31

## SEPTEMBER.

Stichter Hardware Co.....	Cement.....	\$ 130 00
Reading Planing Mill.....	Mill work and stakes.....	31 52
Review Publishing Co.....	Advertising water rents.....	5 76
J. Knabb & Co.....	Advertising water rents.....	7 12
Herald Publishing Co.....	Advertising water rents.....	6 00
Leinbach Bros.....	Uniforms for watchmen.....	33 00
Geo. W. Miller.....	Cleaning cesspool.....	36 50
Taenzer Bros.....	Meter books.....	5 00
Thomson Meter Co.....	Meters.....	308 50
Hoff Bros.....	Cement.....	11 69
H. C. Wonnberger.....	Daily consumption record book.....	13 00
H. C. Wonnberger.....	Registry book for Maidencreek.....	4 50
Wm. McIlvaine & Sons.....	Sheet steel.....	2 06
Greth Machine Works.....	Fittings .....	6 35
Greth Machine Works.....	Fittings .....	1 44
Jacob V. R. Hunter.....	Tin and copper work.....	75 78
Henry Connard.....	Pipe and fittings.....	19 19
Penna. R. R. Co.....	Freight.....	1 51
Jesse G. Hawley.....	Advertising.....	10 72
Bertolet & Hunter.....	Coal.....	269 89
Reading Lumber Co.....	Lumber .....	7 51
A. P. Smith Mfg. Co.....	Smith sleeves.....	99 00
Thomson Meter Co.....	Meter repairs.....	2 00
A. P. Smith Mfg. Co.....	Smith fittings.....	63 50
Thomson Meter Co.....	Meters.....	95 80
National Meter Co.....	Meters.....	742 00
Greene, Tweed & Co.....	Packing.....	28 68
National Meter Co.....	Meters.....	249 54
W. Rosenthal.....	Printing and advertising.....	23 86
George F. Lance.....	Lumber .....	129 14
Metropolitan Electric Co.....	Arc light, Penn Street Reservoirs.....	8 75
Union Water Meter Co.....	Meters.....	20 50
Walworth Mfg. Co.....	Hall pipe cutter.....	22 50
Rensselaer Mfg. Co.....	Gates and fire hydrant.....	335 50
H. Mueller Mfg. Co.....	Drills and taps.....	20 25
H. Mueller Mfg. Co.....	Corporation cocks.....	72 75
A. Wilhelm Co.....	Asphaltum.....	3 75
Hersey Mfg. Co.....	Meters.....	500 00
E. L. Nuebling.....	Gas, toll and freight.....	3 38
E. L. Nuebling.....	Labor, August 16th to 31st.....	1,743 09
Water and Gas Pub. Co.....	Subscription water and gas.....	5 00
Wm. T. Hain.....	Nickel work at Maidencreek.....	75 62

## STATEMENT "D."—Continued.

George Foos.....	Carpenter work at Maidencreek...	\$ 100 59
Builders' Iron Foundry....	Balance on Venturi meters.....	2,502 50
Reading Lime Co.....	Sand .....	1 00
Philip K. Heller.....	Lumber and shingles.....	13 71
Metropolitan Electric Co.	Arc light, Penn Street Reservoirs	8 75
Reading Iron Co.....	Coke .....	2 78
Reading Iron Co.....	Coke .....	1 29
Greth Machine Works.....	Repair work and fittings.....	6 70
E. L. Nuebling.....	Expenses of Commissioners and Superintendent to annual con- vention of Amerian Water Works Association.....	246 35
Reading Foundry Co.....	Pipe, specials and gate boxes.....	514 15
Garrett B. Stevens.....	Brick.....	1,113 66
Thomson Meter Co.....	Meter repairs.....	10 45
William Wilson.....	Coke .....	58 00
National Meter Co.....	Meter repairs.....	17 75
Sackett & Wilhelm's.....	Lithographs for Annual Report...	32 00
E. L. Nuebling.....	Labor, September 1st to 15th.....	1,590 39
Bertolet & Hunter.....	Coal .....	271 75
Franklin Fick.....	Exchange of properties at Antie- tam .....	250 00
Walter G. Roland.....	Stationery.....	11 85
Interest on debt.....	.....	10 00
Salaries.....	.....	936 66
Total.....		\$13,031 98

## OCTOBER

A. L. Frame.....	Balance due on Buttonwood street reservoir.....	\$ 1,944 68
Milford N. Ritter.....	Printing.....	6 50
Adam W. Schwartz.....	Rye Straw.....	5 00
Bright & Lerch.....	Kerosene oil.....	10 19
A. W. Glase.....	Livery hire.....	2 50
Garrett B. Stevens.....	Brick.....	51 63
Rensselaer Man'f Co.....	Water gates.....	336 00
E. L. Nuebling.....	Gas, freight and express.....	5 78
E. L. Nuebling.....	Labor, Sept. 16th to 30th.....	1,602 65
Interest on debt.....	.....	14 00
Salaries.....	.....	681 66
Total.....		\$4,660 59

## STATEMENT "D."—Continued.

## NOVEMBER.

E. L. Nuebling.....	Labor Oct. 1st to 15th.....	\$1,808 25
Frank Allen.....	Gauge glasses and washers.....	12 51
E. L. Nuebling.....	Labor Oct. 16th to 31st.....	1,685 30
E. L. Nuebling.....	Gas, freight and express.....	7 14
Salaries.....		1,134 99
		<hr/> \$4,648 19

## DECEMBER.

John S. Thompson.....	Postage.....	\$ 20 00
Penna. R. R. Co.....	Freight.....	8 45
Bagnall, Loud Block Co..	Suction hose and diaphragms.....	34 40
E. L. Nuebling.....	Postage, freight and mileage.....	88 23
Chas. E. Miller.....	Expenses on inspection of streams	9 60
E. L. Nuebling.....	Gas, toll, freight and express.....	8 36
Wilson Clark Co.....	Boiler compound.....	41 52
Ludlow Manf'g Co.....	Automatic air valve.....	22 33
E. L. Nuebling.....	Labor Nov. 1st to 15th.....	1,004 41
Interest on debt.....		6 00
Salaries.....		56 67
Total.....		<hr/> \$1,299 97

## JANUARY.

E. L. Nuebling.....	Labor Dec. 1st to Dec. 15th.....	\$663 20
E. L. Nuebling.....	Labor Nov. 15th to 30th.....	591 32
Benj. Fries.....	County and school tax, Alsace.....	16 70
Temple Sand Co.....	Gravel.....	70 12
Bertolet & Hunter... ..	Coal.....	330 00
Bertolet & Hunter.....	Coal.....	562 13
P. & R. R. Co.....	Freight.....	18 00
O. G. Noack.....	Veterinary services.....	10 25
E. L. Nuebling.....	Freight and express.....	55
H. T. Rowe.....	Plumbing.....	76 91
Reading Fire Ins. Co .....	Insurance premium.....	31 20
Jos. P. O'Reilly.....	Est. Buttonwood street reservoir..	2,554 91
E. E. Hafer.....	Cuts for annual report.....	95 40
E. Summons.....	Fittings.....	71
J. V. R. Hunter.....	Tin roofing.....	2 59
Wetherhold Bros.....	Repairs to vehicles.....	25 20
J. P. O'Reilly.....	Buttonwood street reservoir est....	1,294 59
Geo. F. Lance.....	Lumber.....	262 81
N. T. Kunkle.....	Oils.....	77 50
S. M. Hartman.....	Harness and repairs.....	60 75
P. D. Millholland.....	Elec. work on Venturi meters.....	9 00

## STATEMENT "D."—Continued.

Reading Lime Co.....	Sand.....	\$ 60 60
Chas. L. Jackson.....	Office chairs and repairs.....	19 50
N. T. Kunkle.....	Oils.....	12 70
E. L. Nuebling.....	Labor Dec. 16th to 31st.....	769 74
Metropolitan Electric Co.	Arc light, Penn street reservoir...	35 00
Hoskin & Giles.....	Planting.....	103 00
Philip K. Heller.....	Lumber.....	18 50
Jno. Drexel, Jr.....	Plumbing.....	57 71
Jno. Printz.....	Bricks.....	30 00
D. C. Lotz & Co.....	Hardware.....	3 28
American Supply Co.....	Cotton waste.....	11 18
Merritt Bros.....	Lumber.....	6 82
H. Zabel.....	Horse shoeing.....	3 00
Greth Machine Works.....	Machine work and fittings.....	8 85
Stichter Hardware Co.....	Cement and hardware.....	315 42
Milford N. Ritter.....	Printing and stationery.....	31 42
A. S. Deysher.....	Pickets etc. for Antietam fence...	252 01
E. L. Nuebling.....	Labor Jan. 1st to 15th.....	421 35
Garrett B. Stevens.....	Brick.....	221 26
A. W. Warfel.....	Damages to property North 8th st.	250 00
Montello Brick Works.....	Brick.....	147 51
Jno. Obold & Co.....	Hardware.....	82
Adam Bard.....	Balance for laying main on 12th	50 06
Keystone Blue Paper Co.....	Blue print paper.....	3 75
Chas. Egner.....	Hauling.....	2 25
Henry Connard.....	Gauge valves, etc.....	8 63
Garlock Packing Co.....	Packing.....	7 25
Thos. Jackson Sons.....	Jute.....	15 69
Elij. Goodhart.....	County, school and road tax — Lower Alsace.....	153 28
Wm. F. Remppis & Co.....	Iron Work.....	1 95
J. Geo. Hintz.....	Stationery.....	12 96
Wm. F. Remppis.....	Iron Work.....	97 19
Edison Mfg. Co.....	Supplies.....	27 22
Thomson Meter Co.....	Meter repairs.....	12 20
Water and Gas.....	2 subscriptions.....	6 00
A. P. Smith Mfg. Co.....	Smith Fittings.....	36 00
Thomson Meter Co.....	Meter repairs.....	5 45
National Meter Co.....	Meter repairs.....	17 57
Keuffel & Esser.....	Draughting paper and supplies...	10 08
Koch & Wolf.....	Feed.....	4 40
Hiram Schitler.....	Livery hire.....	37 00
Eng'r News Pub. Co.....	Year's subscription.....	5 00
Chas. E. Miller.....	Expenses inspecting streams.....	1 10
Wetherhold Bros.....	Repairs to vehicles.....	1 30
Cleon Bechtel.....	Roofing and spouting.....	58 75
L. H. Focht.....	Moving and repairing dwelling Maidencreek.....	605 11
Rensselaer Mfg. Co.....	Gates.....	325 60
H. Mueller Mfg. Co.....	Coporation cocks, etc.....	330 83
Hersey Mfg. Co.....	Meters.....	127 80
Ira Schrop.....	Meter books.....	14 25
W. Rosenthal.....	Advertising and printing.....	36 41

## STATEMENT "D."—Continued.

H. Hill.....	Electrical work.....	\$ 8 90
Jno. Thomson.....	Postage.....	8 00
Stichter Hardware Co.....	Hardware.....	23 05
P. & R. R. R. Co.....	Freight.....	14 00
Reading Planing Mill Co.....	Mill work.....	8 57
Henry G. Young, Treas.....	Sinking fund.....	7,500 00
Chas. L. Jackson.....	Filing case for vault.....	92 50
A. L. Roth.....	Lime, sand, cement.....	57 21
E. L. Nuebling.....	Freight, etc.....	1 17
Bertolet & Hunter.....	Coal.....	164 76
Keystone Steam Heat Works.....	Heaters for Maidenc'k dwellings.....	443 98
Chas. F. Heller.....	Binding annual reports.....	189 50
Cameron E. Strouse.....	Acknowledging deeds.....	5 00
E. L. Nuebling.....	Gas, freight and car fare.....	5 43
Henry Deysher.....	Road tax, Alsace.....	22 26
George Stichter.....	Repairs to gas fixtures.....	12 33
A. W. Glase.....	Livery hire.....	5 50
A. Keller.....	Road tax, Muhlenberg.....	32 55
W. Rosenthal.....	Printing annual reports.....	250 00
Henry Seidel.....	Coal and sard at Bernharts.....	170 87
Penna. Tel. Co.....	Telephone rental.....	329 72
Jos. P. O'Reilly.....	Est. Buttonwood street reservoir.....	2,507 59
J. Sponagle.....	Recording deeds.....	19 25
Wm. H. Dechant.....	Surveys for exchange, Antietam.....	92 95
Hoff & Bro.....	Cement and hardware.....	76 13
Jas. O'Rourke.....	Hauling.....	3 75
D. D. Becker.....	County and school tax, Muhlenb'g.....	46 11
Jesse G. Hawley.....	Stationery.....	2 38
Reading Foundry Co.....	Pipe, specials and boxes.....	1,917 56
H. H. Heckman.....	Painting and papering, Maidenc'k.....	548 80
E. H. Zacharias.....	Fittings and supplies.....	26 24
Ermentrout & Boyer.....	Machine work.....	8 48
Geo. Regenfuse & Co.....	Brushes.....	2 00
Excel. Planing Mill Co.....	Mill work.....	8 12
Excel. Planing Mill Co.....	Mill work.....	3 67
F. Shunk Planing Mill Co.....	Mill work.....	8 18
Geo. W. Miller.....	Cleaning cesspool.....	31 65
Interest on debt.....		10,446 00
Salaries.....		1,889 51
Total.....		\$38,532 26

## FEBRUARY.

E. L. Nuebling.....	Labor, January 16th to 31st.....	\$313 93
Benz Bros.....	Bath rooms and attachments, Maidencreek.....	259 07
H. C. Geissler & Son.....	Oil stoves for register houses.....	17 30
Jno. Moore.....	Overflow damages, Bernhart.....	10 00
Hoskin & Giles.....	On account fall planting.....	100 00
Samuel Strausser.....	Repairs to office fixtures.....	10 05

## STATEMENT "D."—Continued.

E. L. Nuebling.....	Gas and freight.....	\$ 5 73
Bright & Lerch.....	Oil and oil tanks.....	77 68
H. Zable.....	Horse shoeing.....	7 50
E. L. Nuebling.....	Labor, February 1st to 15th.....	332 52
Geo. Kissinger.....	Feed.....	15 00
Paul Anthony.....	Office to shop telephone.....	27 09
Henry G. Young, Treas.....	Mineral Spring appropriation.....	2,500 00
Jno. Seidel.....	Purchase of tract at Antietam.....	250 00
Reading Telegram.....	Advertising.....	9 60
J. Bachofer.....	For window broken by blasting.....	3 50
Bertolet & Hunter.....	Coal.....	96 63
Wetherhold Bros.....	Repairs.....	9 00
Daily Review.....	Advertising.....	10 00
Metropolitan Electric Co.....	Arc light, Penn St. Reservoirs.....	17 50
Interest on debt.....		70 00
Salaries.....		933 98
Total.....		\$5,076 08

## MARCH.

J. Geo. Hintz.....	Stationery.....	\$ 12 00
E. L. Nuebling.....	Labor, February 16th to 28th.....	223 31
Bard, Reber & Co.....	Hardware.....	105 71
E. L. Nuebling.....	Gas and toll.....	4 85
Walter G. Roland.....	Stationery.....	1 50
Greene, Tweed & Co.....	Packing.....	8 46
National Meter Co.....	Meter repairs.....	10 55
Thomson Meter Co.....	Meter repairs.....	3 55
J. Knabb & Co.....	Printing.....	2 55
L. H. Focht.....	Repairs to dwelling, Maidencreek.....	8 04
Ahrens & Tobias.....	Sand.....	15 08
J. G. Hawley.....	Advertising.....	16 80
Montello Brick Co.....	Brick.....	73 76
Reading Foundry Co.....	Pipe, specials and gate boxes.....	104 39
C. Wentzel & Son.....	Fence posts, &c.....	30 20
J. Knabb & Co.....	Advertising.....	10 80
O. G. Noack.....	Veterinary services.....	13 50
Rensselaer Manf'g Co.....	Water gates.....	123 00
Milford N. Ritter.....	Printing and stationery.....	7 50
W. Rosenthal.....	Advertising and furnishing proposals.....	92 24
E. L. Nuebling.....	Labor, March 1st to 15th.....	323 04
C. D. Miller.....	Sand and coal.....	19 63
N. T. Kunkle.....	Oil.....	25 00
J. G. Hawley.....	Advertising.....	10 80
Met. Electric Co.....	Arc light, Penn St. Reservoirs.....	8 75
Samuel Strausser.....	Repairs to office fixtures.....	2 13
Ermentrout & Boyer.....	Pipe, fittings and machine work.....	68 58
Strunk & Moyer.....	Feed.....	20 50
E. L. Nuebling.....	Freight, etc.....	6 24
W. H. Dechant.....	Planting corner stones, Antietam.....	8 70

## STATEMENT "D."—Continued.

C. K. Griesemer.....	Slating.....	\$ 1 83
E. H. Zacharias.....	Fittings.....	8 54
Reading Foundry Co.....	Pipe and specials.....	57 74
Jos. A. Allgaier.....	Insurance Maidencreek Pumping Station.....	75 00
Herald Publisding Co.....	Advertising... ..	10 00
Gittleman & Harbach.....	Papering and painting, Maiden- creek.....	8 22
M. J. Earl.....	Paper for gaskets.....	40
L. Kremp Real Estate Agency.....	Insurance on dwellings, Maiden- creek.....	45 00
Greth Machine Works.....	Pipe, fittings and machine work...	8 62
H. Hinnershitz.....	Rails for fences.....	41 07
Fred'k Seidel.....	On account purchase of tract, An- tietam.....	150 00
A. P. Smith.....	Smith fittings.....	175 00
Interest on debt.....	.....	32 00
Salaries.....	.....	911 66
Total.....		\$2,886 24

## APRIL.

H. R. Worthington.....	Repairs to air compressor and meter.....	\$ 56 63
National Meter Co.....	Meter repairs.....	10 25
Chas. F. Heller.....	Stationery.....	4 50
H. F. L. Rummel.....	Mill work.....	4 68
George F. Lance.....	Lumber.....	9 51
A. H. Saunders & Co.....	Numbering machine for treasurer	16 00
Bard, Reber & Co.....	Hardware.....	11 49
Bertolet and Hunter.....	Coal.....	169 00
George Kissinger.....	Feed.....	50
Interest on debt.....	.....	20 00
Salaries.....	.....	374 72
Total.....		\$677 28

## SUMMARY.

April.....	\$7,855 59
May.....	3,486 53
June.....	1,099 36
July.....	38,243 60
August.....	6,986 31
September.....	13,031 98
October .....	4,660 59
November.....	4,648 19
December .....	1,299 97
January .....	38,532 26
February.....	5,076 08
March .....	2,886 24
April.....	677 28
<hr/>	
Total expenditures.....	\$128,483 98



# STATEMENT "B."

## SHOWING PROPERTY OWNED BY THE WATER DEPARTMENT.

LOCATION.	SUPPLY.	OF WHOM PURCHASED.	IMPROVEMENTS	AREA.	APPA.	OWNER.
Lower Allice Township...	Antleam Lake...	J. and D. Bush.....	Part of Antleam Lake and Waterhouse's house	49	10	Upper Middle and Wells Antleam Lake
" "	" "	Rebecca Hella.....	Part of Antleam Lake	14	24	Waterhouse's house
" "	" "	Charles Huggan.....	Part of Antleam Lake	1	14	"
" "	" "	H. J. and J. D. Mellet.	Part of Antleam Lake	11	"	"
" "	" "	J. D. Mellet.....		14	4	"
" "	" "	Amelia Mellet.....		1	"	"
" "	" "	Charles Huggan.....	House and barn	44	9	Upper Middle and Wells Antleam Lake
" "	" "	Charles R. Wentzel.	House and barn	14	4	Upper Middle and Wells Antleam Lake
" "	" "	Henry R. Mellet.....	House and barn	14	47	Upper Middle and Wells Antleam Lake
Allice Township.....	" "	Harlan Hugganville.		4	24	Upper Middle and Wells Antleam Lake
" "	" "	Daniel Faust.....		4	24	"
" "	" "	Franklin Pick.....		44	44	"
" "	" "	Franklin Pick.....		44	44	"
" "	" "	Jonathan Mellet.....		44	44	"
Lower Allice Township.	" "	David Mellet.....	Regulator house	44	44	"
" "	" "	Reading Water Co.	Part of Huggan farm	44	44	"
" "	" "	S. H. Carrigan.....	Part of Huggan farm	44	44	"



## STATEMENT "F."

A COMPARATIVE STATEMENT, SHOWING REVENUE FROM EACH OF THE SEVERAL SOURCES FOR EACH YEAR SINCE 1865, ALSO SHOWING NUMBER OF FEET OF PIPE LAID IN THOSE YEARS.

YEAR.	Receipts from Water Rents.	Penalties on Water Rents.	Receipts on from Frontage Tax.	Receipts from Penalties for Frontage.	Receipts from Fertile At- tachments.	Receipts from Rentals of Real Estate.	Receipts from Lien Accounts.	No. of feet of pipe laid.
1865	\$11,346 65	.....	\$ 315 98	.....	.....	\$ 1,254 90	.....	*63,409
1866	23,980 40	\$ 248 09	395 97	.....	.....	1,803 36	.....	3,595
1867	32,249 30	220 48	2,662 55	.....	.....	1,599 97	.....	8,307
1868	31,283 42	221 70	3,429 37	.....	.....	1,873 57	.....	16,916
1869	32,713 73	336 03	14,105 79	.....	.....	1,148 34	.....	9,778
1870	37,227 73	421 43	19,941 95	.....	.....	881 12	.....	32,668
1871	42,862 83	597 73	12,620 90	.....	.....	840 10	.....	18,353
1872	55,439 75	440 37	8,243 88	\$ 272 98	.....	685 00	.....	17,353
1873	52,823 12	403 65	4,668 72	87 59	.....	580 13	.....	7,527
1874	57,956 02	416 99	7,073 84	151 34	.....	1,038 75	.....	11,230
1875	61,519 33	372 00	4,896 85	.....	.....	881 68	\$ 180 13	4,120
1876	63,116 15	135 14	2,559 98	.....	\$ 212 00	756 75	882 25	
1877	54,818 65	145 65	471 38	.....	282 00	754 00	1,392 25	Estimated
1878	53,299 00	245 13	201 38	.....	148 00	1,325 47	1,745 07	77,994 feet.
1879	48,551 84	488 76	181 67	.....	244 00	1,572 18	3,392 26	

\*Pipe laid by old Water Company previous to purchase in 1865.

# STATEMENT "F."—Concluded.

YEAR.	Receipts from Water Rents.	Penalties on Water Rents.	Receipts from Frontage Tax.	Receipts from Penalties for Frontage.	Receipts from Furniture At- tachments.	Receipts from Rentals of Real Estate.	Receipts from Lien Accounts.	No. of feet of pipe laid.
1880.....	\$67,047 29	\$ 555 36	\$ 152 33	.....	\$ 314 00	\$1,178 94	\$1,195 45	
1881.....	63,218 42	16 85	841 69	.....	672 00	1,603 33	1,017 85	
1882.....	78,517 33	620 75	5,195 22	.....	620 00	1,285 15	1,002 93	
1883.....	68,934 23	130 48	3,326 60	.....	768 00	1,084 95	953 36	4,860
1884.....	72,520 73	356 77	3,315 87	.....	1,056 00	1,201 71	49 27	7,020
1885.....	73,432 45	335 16	5,093 29	.....	1,039 00	1,274 20	463 52	5,060
1886.....	79,509 25	491 19	5,355 67	.....	857 00	1,026 70	1,991 22	9,431
1887.....	83,421 70	540 19	5,356 62	.....	1,250 00	983 27	1,222 76	12,899
1888.....	87,404 66	448 69	8,040 02	.....	1,311 00	620 05	502 75	15,731
1889.....	91,469 04	720 32	4,829 52	.....	916 00	893 00	411 00	8,430
1890-'91—15 months	132,056 68	642 02	4,603 41	.....	1,050 00	912 95	1,270 15	11,716
1891-'92.....	102,289 86	620 95	7,634 21	.....	1,272 00	310 00	1,838 82	10,510
1892-'93.....	117,887 43	816 11	14,808 09	.....	2,099 38	590 00	1,509 23	72,574
1893-'94.....	122,701 26	415 73	10,506 96	.....	1,611 18	300 00	1,157 00	27,251
1894-'95.....	114,652 18	488 03	8,525 12	.....	1,223 38	875 25	1,917 12	17,418
1895-'96.....	125,259 32	639 24	6,247 51	.....	1,359 63	378 50	2,602 39	17,333
1896-'97.....	125,303 21	448 53	2,786 01	.....	1,255 32	141 00	989 72	8,677



# STATEMENT "H."

SHOWING THE LOCATION AND SIZE OF ALL PIPES IN USE ON THE 5TH DAY OF APRIL, 1897, ALSO PIPE LINES ABANDONED.

STREET.	FROM	TO	1½ in.	2 in.	3 in.	4 in.	5 in.	6 in.	8 in.	10 in.	12 in.	16 in.	20 in.	24 in.	30 in.
South street	Canal street	Ninth street						720		1482					
" "	Seventh street	East										1098			
Willow st	Fifth street	Seventh street													
" "	" "	East													
" "	Sixth street	Seventh street				340									
East Laurel	Ninth street	Tenth street				533									
Laurel street	Fourth street	Neversink st.				543									
" "	Neversink st	Ninth street				2467		255				1096			
" "	Seventh street	" "													
Fairview st.	Fourteenth st.	West side 19th						2855							
Kennedy st.	Thirteenth st.	Fourteenth st.						443							
Cotton street	Ninth street	Eleventh street				1070									
" "	" "	" "													
" "	Eleventh st.	East						1565							
" "	" "	Fourteenth st.													
" "	Fourteenth st.	15½ street						908							
" "	15½ street	Nineteenth st													
Pine street	Canal street	Mifflin street								1955					
" "	East of 2nd st	Third street						465							
" "	West side 3rd	Fourth street													
" "	Fourth street	Fifth street													
East Pine st.	Sixth street	Seventh street				572		556							
McIlvain st.	Neversink al	Neversink st.				542		178							
Neversink al	McIlvain st	Northwest						270							
Gilson alley	Neversink al	South						170							





HARPER PHOTO.



Muhlenberg	Eighth street	Eleventh street							
"	Eleventh st.	E. of Fourteenth							
Benner's ct.	Maple street	East	167	1933					
Spruce street	Water street	Second street	540	1146					
"	Second street	Third street		270					
"	Third street	Carpenter st.							
"	Carpenter st	Fourth street	270						
"	Fourth street	Pearl street		832					
"	Pearl street	Seventh street	814						
"	Ninth street	Orange street	270						
"	Orange street	Tenth street		272					
"	Tenth street	Wunder street	812						
"	Wunder street	Clymer street		1725					
Haak street	Seventeenth	Eighteenth st.		531					
Chestnut st.	Water street	Third street	1500						
"	Third street	Wood street		812					
"	West s. Wood	Eleventh street			3537				
"	Fifth street	Sixth street	548						
"	Sixth street	Plum street		272					
"	Plum street	Ninth street							
"	Ninth street	Tenth street	540						
"	Tenth street	Perkiomen ave.		1702					
"	Eleventh st.	"							
Min'l sp. rd.	Perkiomen ave.	East of 18th st							
"	"	East							
"	Clymer street	West		485					
"	W. of Clymer	East of 16th st	1460						
Bingaman st	Water street	Chestnut street.							
"	Fourth street	Fifth street							
"	Pearl street	West side 9th st	2081						
Grape street	Front street	Second street		619					
Franklin st.	"	Perkiomen ave.		541					
Hill Road	W. of Clymer	Lombard street		6080					
"	Lombard st.	Near City Line		962					
									2408

1160  
3018



Washington	Front street	Second street	531					553	
"	Second street	Third street		811					
"	Third street	Ash street			3518				
"	Ash street	Eleventh street		670					
"	Church street	E. of Reed st.		2134					
"	Seventh street	Eleventh street							
Dick street	"	Poplar street			249				
Walnut st.	Front street	Second street			1081		542		
"	Second street	Fourth street							
"	Fourth street	E. of Locust st.		4274					
"	Fifth street	E. S. 11th street							
"	Lombard st.	Fourteenth st.							
Jefferson st.	River Road	Front street		940				416	
Hockley st.	W. S. Tul'h	W. S. Front st.		1100					
Elm street	Front street	Second street			542				
"	Third street	Ash street			809				
"	Ash street	Sixth street		830					
"	Sixth street	Reed street			270				
"	Eighth street	Tenth street		1083					
"	Tenth street	W. S. Lombard			1452				
Fidelity st.	Twelfth street	Lombard street			325				
Buttonwood	Tulpeh'ken st.	Schuykill Ave.			657				
"	Sch'kill Ave.	Fifth street					2889		
"	Fourth street	East			320				
"	Fifth street	Reed street			820				
"	Eighth street	East					51		
"	Cedar street	Tenth street		813					
"	Tenth street	W. S. 12th st.			1050				
"	W. S. 11th st.	Linden street					1403		
"	Linden street	E. of Palm st.							
Woodward st	Fourth street	Fifth street		589				756	
Green terra'e	F. S. 4th street	Centre Avenue							
Lafayette st.	W. S. Clinton	Tulpehocken st		351					
Green street	Tulpeh'ken st	W. S. McKnight			1302				



Windsor st.	Third street	Sixth street
"	Eighth street	Tenth street
"	Tenth street	Birch street
Spring street	Weiser street	Madison Ave.
"	Madison Ave.	Sixth street
"	Sixth street	Eighth street
"	W. of 8th st.	E. of 14th st
"	E. of Birch st.	Pricetown road
Robeson st.	Pear street	Centre avenue
"	Rose street	Sixth street
"	Tenth street	Eleventh street
"	Eleventh st.	E. of Linden st
"	Face of Gate	
"	House at	
"	Ham pden	
Marion st.	Reservoir	West
"	Ninth street	E. S. 11th st.
"	"	Thirteenth st.
Perry street	Thirteenth st.	Palm street
Pike street	Ninth street	Eleventh street
"	"	Tenth street
Amity street	Tenth street	Eleventh street
"	Moss street	West
"	Tenth street	Mulberry street
Union street	Centre Ave.	West
Exeter street	E.S.McKnig't	E. S. Centre ave
"	Moss street	Tenth street
Bern street	Front street	E. S. Centre ave
"	Centre Ave.	Sixth street
"	Kutztown Rd.	Moss street
Richmond st	Centre Ave.	Sixth street
"	Kutztown Rd.	Thirteenth st.
Hiester's l'e	Sixth street	Kutztown Road
River Road	Buttonwood st	Court street

1631	1354	832
2571		
	830	
1508	3052	
	300	
253		543
1384		1472
	75	150
1118	2145	
		814
1087		
541	547	
130		
270		
50		
651		
270		
666		2046
	64	
		1960
		2062
		1786
		1804

2277

## STATEMENT "H."—Continued.

SHOWING THE LOCATION AND SIZE OF ALL PIPES IN USE ON THE 5TH DAY OF APRIL, 1897, ALSO PIPE LINES  
ABANDONED.—Continued.

STREET.	FROM	TO	1½ in.	2in.	3in.	4in.	5in.	6in.	8in.	10in.	12in.	16in.	20in.	24in.	30in.
Tulpeh'n st.	Green street	Greenwich st.						595							
"	S. of Buttonw.	Lafayette street						870							
Gordon st.	Green street	Greenwich st.						595							
"	Douglass st.	North						550							
Hamilton st.	Sch'kill Ave.	Jefferson street													
Sch'kill ave.	Front street	N. S. Windsor				600		4645							
"	Greenwich st.	South													
Rosenthal st.	Buttonw'd st.	North						438				60			
Water street	Bingaman st.	"							280						
"	Spruce street	Chestnut street				356		225							
Front street	Grape street	N. of Cherry st.				563									
"	S. S. Penn st.	River Road				356									
"	Penn street	Court street								320					
"	Court street	L. V. R. R.						2454							
"	Greenwich st.	N. S. Windsor								1641					
"	Bern street	North						217							
Canal street	South street	Pine street								3285					
"	"	Sixth street						360							
"	"	Fifth street				694									
"	Fourth street	Southeast				150									
"	"	Northwest				360									
"	Third street	"		400											
"	Pine street	"													
"	Spruce street	Chestnut street				245									
Oak street	Franklin st.	Cherry street				560									
Pear street	Washing'n st.	L. V. R. R.				280		2242							

Pear street	Oley street	Douglas street	540						
"	Fixter street	Bern street	540						
Second street	Spruce street	Chestnut street		545					
"	Chestnut st.	S. S. Penn street	1072						636
"	S. S. Penn st.	Washington st.							
"	Washing't'n st	South		247					
"	"	"							
"	N. of Green st	N. of Beech st.	2286						
Miffin street	Pine street	Douglas street	1480						
"	Spruce street	Spruce street	536						
"	Chestnut street	Chestnut street		545					
Thorn street	N. S. Court st.	Washington st.	270						
"	Greenwich st.	Oley street							
"	Douglas st.	Windsor street	540						
"	Canal street	Pine street	540						
Third street	Pine street	Spring street	7747						
"	"	South	211						
"	"	North	34						
"	"	"	1215						
Carpenter st.	Bingaman st.	Spruce street							
"	Spruce street	North			333				
"	S. of Chestnut	Franklin street							
"	Franklin st.	Cherry street	754						
Rose street	Washing't'n st	North		279					
"	"	"		300					
"	S. of Walnut st	Buttonwood st.							
"	Windsor street	Spring street	1374						
Fourth street	Canal street	Bingaman st.	540						
"	Bingaman st.	Woodward st.		696					
"	Oley street	Windsor street	5095						
Wood street	Pine street	Chestnut street	1080						
"	Chestnut st.	Franklin street		1089					
"	Franklin st.	Cherry street	542						
Ash street	Court street	Washington st.		281					
"	Washing't'n st	Walnut street	265						
"	"	"	540						
"	Elm street	South	166						
Madison ave.	Oley street	Douglas street	540						

# STATEMENT "H."—Continued.

SHOWING THE LOCATION AND SIZE OF ALL PIPES IN USE ON THE 5TH DAY OF APRIL, 1897, ALSO PIPE LINES  
ABANDONED.—Continued.

STREET.	FROM	To	1½ in.	2in.	3in.	4in.	5in.	6in.	8in.	10in.	12in.	16in.	20in.	24in.	30in.
Centre ave.	Fifth street	Robeson street						3806					2262		
"	S. S. Amity st.	Richmond st.												1271	
"	Richmond st.	City line													
Fifth street	Canal street	Greenwich st.										6922	218:		
"	Greenwich st.	N. S. Spring st.													
"	Canal street	Spruce street						1901							
"	Spruce street	Penn street						2640	1716						
"	Penn street	Centre avenue													
Pearl street	Willow street	Chestnut street				2227									
"	Chestnut st.	Franklin street						534							
Church st.	Washington st.	Buttonwood st.				1670									
"	Buttonwood st.	Woodward st.						434							
"	Greenwich st.	Marion street						3242							
Sixth street	Canal street	Spring street						9273							
"	Spring street	Robeson street									540				
"	Robeson street	S. S. Union st.						2670					617		
"	Bern street	Richmond st.													
Minor street	S. of Willow st.	Bingaman st.				1708									
Plum street	Bingaman st.	Spruce street				316									
"	Spruce st.	N. of Chestnut						671							
"	N. of Chestnut	Franklin street				415									
"	Franklin st.	Cherry street						280							
Reed street	Court street	North				90									
"	Washington st.	N. of Walnut st.				928									
"	N. of Walnut	Buttonwood st.						742							
Seventh st.	South street	N. of Spruce st.						3196							





# STATEMENT "H."—Continued.

SHOWING THE LOCATION AND SIZE OF ALL PIPES IN USE ON THE 5TH DAY OF APRIL, 1897, ALSO PIPE LINES ABANDONED.—Continued.

STREET.	FROM	TO	1½ in.	2 in.	3 in.	4 in.	5 in.	6 in.	8 in.	10 in.	12 in.	16 in.	20 in.	24 in.	30 in.
Moss street	Greenwich st.	Oley street				540		1620							
"	Oley street	Spring street				3780									
"	Spring street	Exeter street													
"	Exeter street	North							67						
"	Bern street	"													
Tenth street	N. S. South st.	E. Laurel street						42							
"	E. Laurel st.	Cotton street						85							
"	Cotton street	Spring street				758									
"	Windsor st.	Robeson street						7876							
"	N. S. Robeson	N. of Amity st.						2220					1080		
"	Exeter street	South						230							
Maple street	N. S. South st.	Cherry street				2761									
Mulberry st.	Court street	Oley street				3564									
"	Douglass st.	Spring street						1080							
"	Perry street	Pike street.						540							
"	Amity street	South						43							
Eleventh st.	S. of Cotton st.	Douglass street						7046							
"	Cotton street	N. of Robeson										8577			
"	N. of Robeson	N. of Pike street													
"	Penn street	Court street						1253			320				
Wunder st.	South street	Cotton street						480							
"	Muhlenberg st.	Spruce street						352							
"	Spruce street	Franklin street													
Locust street	Walnut street	Green street				1084									
"	Green street	Marion street				1662									
12th street	South street	Cotton street						3780							
								350							





# STATEMENT "H."—Concluded.

## SUPPLY LINES OUTSIDE OF CITY LIMITS.

STREET.	FROM	TO	1½ in.	2in.	3in.	4in.	5in.	6in.	8in.	10in.	12in.	16in.	20in.	24in.	30in.
Maidencre's Pumping Sta. supply station		N. City Line													
Bernh't sup-Gate west of ply Bernh't dam		N. City Line										5438		9653	11687
Bernh't sup-Gate west of ply Bernh't dam		N. City Line								2067	3816				
Egelm. sup-Gate south of ply Egelm. dam		S. E. S. Hill Rd.								2892	178				
Ant'tam sup-Gate House ply Ant'm Lake Aulenbach's Fe												493	12737	1763	
Total feet of pipe in supply lines outside of city limits...										4959	3994	5931	12737	11416	11687

Total miles of pipe in distribution system..... 86.60

" " " outside of city limits..... 9 61

" " " owned by department..... 96.21

## LOCATION AND LENGTH OF PIPE LINES ABANDONED DURING YEAR.

Seventh street, north of Penn street.....	894 feet of 1½ inch pipe.
Seventh street between Penn street and Chestnut street.....	1142 feet of 3 inch pipe.
Cherry street between Seventh street and Lemon street.....	185 feet of 4 inch pipe.
Second street between Court street and Washington street.....	285 feet of 4 inch pipe.
Washington street between Second street and Pear street.....	235 feet of 4 inch pipe.
Across private property, east of Twelfth street between Greenwich and Oley streets.....	602 ft. of 10 inch pipe.

Total..... 3343

# STATEMENT "1."

SHOWING NUMBER, LOCATION, MAKE, ETC., OF ALL FIRE HYDRANTS THROUGHOUT THE CITY ON  
APRIL 5TH, 1897.

NUMBER.	LOCATION.	MAKE OR MAKER.	SERVICE.	NUMBER OF OUTLETS.	SIZE OF MAIN PIPE	PRESSURE AT HYDRANT
1	Amity west of Mulberry.....	New Mellert	Intermediate	3	6	65
2	Ash north of Court.....	R. D. Wood & Co.	Low	1	4	39
3	Benners Court east of Maple.....	New Mellert	Intermediate	2	4	75
4	Bern west of Pear.....	"	Low	3	6	57
5	" " Centre avenue.....	Tamaqua	"	3	6	58
6	" " Third.....	New Mellert	"	3	20	63
7	" " Rose.....	"	"	3	20	62
8	Bingaman at Water.....	"	"	3	10	61
9	" east of Canal.....	"	"	3	10	63
10	" " Fourth.....	"	"	3	10	59
11	" " Wood.....	Stileman	"	1	6	56
12	" " Fifth.....	New Mellert	"	3	10	53
13	" " Pearl.....	"	"	3	10	51
14	" " Sixth.....	"	"	3	10	48
15	" " Plum.....	Old Mellert	"	1	4	46
16	" " Minor.....	New Mellert	"	3	10	46
17	" west of Seventh.....	Tamaqua	"	3	4	43
18	" at Neversink.....	New Mellert	"	3	10	42
19	" east of Lemon.....	"	"	3	10	41
20	" " Peach.....	Old Mellert	"	1	4	39
21	" west of Spring Garden.....	New Mellert	"	3	10	39
22	" " Ninth.....	"	"	3	10	37

23	Bingaman west of Orange.....	New Mellert				35
24	Buttonwood west of Gordon.....	"	Intermediate	3	10	74
25	" " Rosenthal .....	"	"	3	6	67
26	" " Front .....	"	"	3	10	70
27	" " Second .....	"	"	3	10	73
28	" east of Third.....	Tamaqua	"	3	10	78
29	" west of Fourth.....	"	"	3	10	76
30	" east of Ash.....	"	"	3	10	78
31	" " Fifth.....	"	Low	3	6	48
32	" " Sixth.....	New Mellert	"	3	6	44
33	" Cedar.....	Stileman	Intermediate	1	4	68
34	" west of Tenth.....	"	"	1	4	56
35	" east of Mulberry.....	"	"	1	6	53
36	" " Eleventh .....	New Mellert	"	3	6	46
37	" west of Twelfth.....	Old Tamaqua	"	1	6	32
38	" " Birch.....	Galvin	"	3	10	20
39	" " Thirteenth.....	"	Hampden	3	10	16
40	Canal between South and Sixth.....	"	Low	3	10	64
41	" northwest of Sixth.....	New Mellert	"	3	10	62
42	" between Fifth and Sixth.....	Stileman	"	1	4	62
43	" between Fourth and Fifth.....	New Mellert	"	3	4	63
44	" southeast of Bingaman .....	Old Mellert	"	1	4	63
45	" between Bingaman and Island.....	Tamaqua	"	3	10	64
46	" north of Norton.....	Stileman	"	1	4	62
47	Carpenter north of Bingaman.....	Tamaqua	"	3	6	61
48	" between Spruce and Pine.....	New Mellert	"	3	6	59
49	" " Chestnut.....	Old Mellert	"	1	3	56
50	" " Chestnut and Franklin.....	Galvin	"	3	6	54
51	Cedar north of Court.....	Stileman	"	1	4	30
52	" between Washington and Walnut.....	New Mellert	"	3	6	32
53	" " Walnut and Elm.....	Old Mellert	Intermediate	1	4	69
54	" " Elm and Buttonwood.....	"	"	1	4	69
55	Centre avenue north of Greenwich.....	New Mellert	"	3	6	60
56	" between Oley and Douglass.....	Stileman	"	1	6	56

## STATEMENT "I."—Continued.

SHOWING NUMBER, LOCATION, MAKE, ETC., OF ALL FIRE HYDRANTS THROUGHOUT THE CITY ON  
APRIL 5TH, 1897.

NUMBER.	LOCATION.	MAKE OR MAKER.	SERVICE.	NUMBER OF OUTLETS.	SIZE OF MAIN PIPE	PRESSURE PER SQ. IN.	HYDRANT AT
57	Centre avenue south of Third.....	Tamaqua	Intermediate	3	6	51	
58	Cherry east of Apple.....	"	Low	2	6	57	
59	" at Carpenter.....	Stileman	"	1	4	52	
60	" at Plum.....	Galvin	"	3	4	40	
61	" at Peach.....	R. D. Wood & Co.	"	1	4	28	
62	" at Orange.....	New Mellert	Intermediate	3	6	61	
63	Chestnut east of Water.....	Old Mellert	Low	1	4	62	
64	" Canal.....	Tamaqua	"	3	4	62	
65	" Second.....	Old Mellert	"	1	4	60	
66	" at Mifflin.....	Tamaqua	"	1	4	59	
67	" at Third.....	Old Mellert	"	1	6	58	
68	" west of Wood.....	Adams	"	1	6	53	
69	" Fifth.....	Galvin	"	3	10	52	
70	" Pearl.....	New Mellert	"	3	10	49	
71	" Sixth.....	"	"	3	10	46	
72	east of Plum.....	Tamaqua	"	3	10	42	
73	" Seventh.....	New Mellert	"	3	10	37	
74	" "	Old Mellert	"	1	3	37	
75	" Lenon.....	Old Tamaqua	"	1	3	36	
76	west of Peach.....	New Mellert	"	3	10	34	
77	east of Ninth.....	"	"	3	10	35	
78	" Orange.....	"	"	3	10	34	



79	Chestnut west of Tenth.....	New Mellert	Low	3	10	33
80	" " Maple.....	"	Intermediate	3	10	68
81	" " Twelfth.....	Stileman	"	1	6	56
82	" " at Twelfth-and-a-half.....	"	"	1	6	48
83	" " west of Thirteenth.....	New Mellert	"	3	6	42
84	Church at Elm.....	Old Mellert	Low	1	4	40
85	" " south of Buttonwood.....	"	"	1	4	53
86	" " Woodward.....	New Mellert	"	3	6	55
87	" " between Oley and Douglass.....	Old Mellert	Intermediate	1	6	69
88	" " Windsor and Spring.....	New Mellert	"	3	6	63
89	" " south of Robeson.....	Old Mellert	"	1	6	56
90	" " Marion.....	New Mellert	"	3	6	60
91	Clymer opposite Haak.....	"	"	3	6	42
92	" " south of Hill Road.....	Tamaqua	"	3	16	10
93	Cotton east of Ninth.....	New Mellert	"	3	16	83
94	" " west of Tenth.....	"	"	3	16	78
95	" " at Eleventh.....	Stileman	"	1	4	70
96	" " at Twelfth-and-a-half.....	Tamaqua	"	3	6	66
97	" " west of Thirteenth.....	R. D. Wood & Co.	"	1	6	65
98	" " Fourteenth.....	New Mellert	"	3	6	60
99	" " Fourteenth-and-a-half.....	"	"	3	8	58
100	" " Sixteenth-and-a-half.....	Old Tamaqua	"	1	10	50
101	" " Seventeenth-and-a-half.....	New Mellert	"	3	10	40
102	" " at Eighteenth-and-a-half.....	Old Tamaqua	"	1	10	37
103	Court west of Pear.....	New Mellert	Low	2	4	58
104	" " Church.....	R. D. Wood & Co.	"	2	3	41
105	" " Sixth.....	Old Mellert	"	1	3	40
106	" " east of Reed.....	New Mellert	"	3	6	39
107	" " Moss.....	"	Intermediate	3	4	59
108	Dick east of Seventh.....	Old Mellert	Low	1	6	34
109	Douglass at McKnight.....	Tamaqua	Intermediate	3	6	56
110	" " west of Pear.....	"	"	2	6	60
111	" " Second.....	"	"	3	6	61
112	" " east of Centre avenue.....	New Mellert	"	3	6	57

# STATEMENT "I."—Continued.

SHOWING NUMBER, LOCATION, MAKE, ETC., OF ALL FIRE HYDRANTS THROUGHOUT THE CITY ON  
APRIL 5, 1897.

NUMBER.	LOCATION.	MAKE OR MAKER.	SERVICE.	NUMBER OF OUTLETS.	SIZE OF MAIN PIPE	PRESSURE AT HYDRANT
113	Douglass west of Fifth..	New Mellert	Intermediate	3	6	69
114	" " Church.....	Tamaqua	"	3	6	71
115	" " between Lance Place and Ninth.....	New Mellert	"	3	6	70
116	" " east of Moss.....	Galvin	"	3	6	71
117	" " west of Tenth.....	Tamaqua	"	2	6	70
118	" " at Eleventh.....	"	"	3	6	62
119	" " west of Twelfth.....	"	"	1	6	41
120	Eighth north of Mühlenberg.....	Old Mellert	Low	1	6	46
121	" " south of Bingham.....	New Mellert	"	3	16	40
122	" " north of Bingham.....	Old Mellert	"	1	6	40
123	" " between Bingham and Chestnut.....	New Mellert	"	3	16	38
124	" " south of Chestnut.....	"	"	3	16	35
125	" " north of Chestnut.....	"	"	3	16	34
126	" " south of Franklin.....	"	"	3	16	31
127	" " Cherry.....	"	"	3	16	30
128	" " Penn.....	"	"	3	16	33
129	" " north of Penn.....	Tamaqua	"	3	16	33
130	" " Court.....	"	"	1	6	31
131	" " south of Washington.....	New Mellert	"	3	16	32
132	" " between Washington and Walnut.....	"	"	3	16	34
133	" " at Walnut.....	Old Mellert	"	1	6	37
134	" " north of Elm.....	"	"	1	6	38

135	Eight	north of Elm.....	New Mellert	Low	3	16	38
136	"	between Elm and Buttonwood.....	"	"	3	16	37
137	"	north of Buttonwood.....	"	"	3	16	36
138	"	south of Green.....	"	"	3	16	35
139	"	" Greenwiche.....	"	"	3	16	39
140	"	north of Oley.....	Old Mellert	"	1	16	46
141	"	south of Douglass.....	Stileman	"	1	16	44
142	"	north of Hewson.....	"	"	1	16	45
143	"	at Windsor.....	"	"	1	16	45
144	"	between Windsor and Spring.....	New Mellert	"	3	16	46
145	"	at junction of Ninth.....	Old Mellert	"	1	16	45
146	Eighteenth	north of Fairview.....	Tanaqua	Intermediate	3	6	15
147	Eleventh	between South and Cotton.....	"	"	1	6	53
148	"	north of Muhlenberg.....	R. D. Wood & Co.	"	1	6	74
149	"	at Spruce.....	Tanaqua	"	3	16	73
150	"	between Spruce and Chestnut.....	New Mellert	"	3	16	69
151	"	at Chestnut.....	Old Mellert	"	1	6	66
152	"	between Chestnut and Franklin.....	"	"	1	6	62
153	"	north of Cherry.....	Stileman	"	1	6	52
154	"	" Penn.....	New Mellert	"	3	16	46
155	"	at Court.....	"	"	3	6	45
156	"	north of Walnut.....	Stileman	"	1	6	51
157	"	" Elm.....	"	"	1	6	48
158	"	south of Green.....	"	"	1	6	49
159	"	north of Greenwiche.....	Tanaqua	"	1	6	55
160	"	" Oley.....	"	"	2	6	60
161	"	at Perry.....	"	"	1	6	68
162	"	at Pike.....	"	"	1	6	67
163	Elm west of Pear.....	New Mellert	Low	3	6	32	
164	" Second.....	Galvin	"	3	6	34	
165	" east of Third.....	New Mellert	"	3	6	45	
166	" west of Sixth.....	Old Mellert	"	1	4	40	
167	" Reed.....	New Mellert	"	3	6	41	
168	" at Moss.....	Stileman	Intermediate	1	4	62	

STATEMENT "I."—Continued.

SHOWING NUMBER, LOCATION, MAKE, ETC., OF ALL FIRE HYDRANTS THROUGHOUT THE CITY ON  
APRIL 5, 1897.

NUMBER.	LOCATION.	MAKE OR MAKER.	SERVICE.	NUMBER OF OUTLETS.	SIZE OF MAIN PIPE	PRESSURE PER SQ. IN.	HYDRANT
169	Elm west of Mulberry	Stileman	Intermediate	1	6	54	
170	" " Locust	"	"	1	6	42	
171	" " Twelfth	Galvin	"	3	6	32	
172	" " Birch	New Mellert	"	3	6	18	
173	Exeter east of McKnight	"	Low	3	6	61	
174	" " west of Centre avenue	Tamaqua	"	3	6	56	
175	" " Tenth	Stileman	Intermediate	1	6	68	
176	Fairview east of Fourteenth	Old Tamaqua	"	1	6	38	
177	" " Seventeenth	Galvin	"	3	6	14	
178	" " Seventeenth-and-a-half	"	"	3	6	13	
179	" " Eighteenth-and-a-half	"	"	3	6	15	
180	Fifth north of Canal	New Mellert	Low	3	16	61	
181	" " between Willow and Laurel	"	"	3	16	58	
182	" " south of Laurel	"	"	3	16	55	
183	" " north of Bingham	"	"	3	16	54	
184	" " between Pine and Spruce	"	"	3	16	53	
185	" " north of Spruce	"	"	3	16	52	
186	" " between Spruce and Chestnut	"	"	3	8	52	
187	" " Chestnut and Franklin	Old Mellert	"	1	8	51	
188	" " at Franklin	New Mellert	"	3	16	50	
189	" " south of Cherry	Old Mellert	"	1	8	48	
190	" " Penn, west side	New Mellert	"	3	16	45	

191	"	"	" east side.....	New Mellert	Low	3	16	45
192	"	"	north of Court.....	R. D. Wood & Co.	"	1	6	41
193	"	"	Washington.....	Old Mellert	"	1	6	39
194	"	"	between Washington and Walnut.....	R. D. Wood & Co.	"	1	6	37
195	"	"	Walnut and Elm.....	Tamaqua	"	1	6	41
196	"	"	north of Elm.....	New Mellert	"	1	16	44
197	"	"	between Elm and Buttonwood.....	"	"	3	16	46
198	"	"	north of Buttonwood.....	"	Intermediate	3	16	83
199	"	"	between Greenwich and Oley.....	"	"	3	20	63
200	"	"	Douglass and Windsor.....	"	"	3	20	66
201	"	"	north of Windsor.....	"	"	3	20	64
202	"	"	south of Spring.....	"	"	3	20	56
203	fourth	"	north of Canal.....	Tamaqua	Low	3	4	61
204	"	"	between Canal and Laurel.....	New Mellert	"	3	4	60
205	"	"	at Pine.....	Old Mellert	"	1	6	58
206	"	"	north of Spruce.....	"	"	1	6	56
207	"	"	" Chestnut.....	"	"	1	6	54
208	"	"	" Cherry.....	"	"	1	6	48
209	"	"	" Court.....	New Mellert	"	3	6	45
210	"	"	at Washington.....	Old Mellert	"	1	6	43
211	"	"	south of Walnut.....	Stilenan	"	1	6	42
212	"	"	" Elm.....	R. D. Wood & Co.	"	1	6	55
213	"	"	between Elm and Buttonwood.....	Adams	Intermediate	1	6	84
214	"	"	Oley and Douglass.....	Tamaqua	"	3	6	58
215	"	"	at Douglass.....	"	"	3	6	58
216	"	"	between Douglass and Windsor.....	"	"	3	6	58
217	fourteenth	"	at Kenney.....	"	"	3	6	50
218	Franklin	"	east of Front.....	New Mellert	Low	3	6	62
219	"	"	west of Second.....	"	"	3	6	60
220	"	"	" Apple.....	"	"	3	6	59
221	"	"	east of Third.....	"	"	3	6	58
222	"	"	" Carpenter.....	"	"	3	6	54
223	"	"	" Fourth.....	Galvin	"	3	6	50
224	"	"	" Wood.....	"	"	3	6	50

## STATEMENT "I."—Continued.

SHOWING NUMBER, LOCATION, MAKE, ETC., OF ALL FIRE HYDRANTS THROUGHOUT THE CITY ON  
APRIL 5TH, 1897.

NUMBER.	LOCATION.	MAKE OR MAKER.	SERVICE.	NUMBER OF OUTLETS.	SIZE OF MAIN PIPE.	PRESSURE PER SQ. IN.	HYDRANT
225	Franklin west of Pearl	Old Mellert	Low	1	6	47	
226	" east of Sixth	Galvin	"	3	6	44	
227	" " Plum	New Mellert	"	3	6	40	
228	" " Seventh	Galvin	"	3	6	36	
229	" west of Lemon	New Mellert	"	3	6	34	
230	" " Peach	"	Intermediate	3	6	66	
231	" " Ninth	Galvin	"	3	6	66	
232	" " Orange	"	"	3	6	65	
233	" " Tenth	"	"	3	6	64	
234	" " Maple	Tamaqua	"	1	6	62	
235	" " Eleventh	Galvin	"	3	6	59	
236	" at Wunder	"	"	3	6	55	
237	Front north of Grape	Old Mellert	Low	1	4	61	
238	" " Cherry	Stileman	"	1	4	60	
239	" south of Court	Old Mellert	"	1	4	61	
240	" between River Road and Washington	New Mellert	"	3	6	57	
241	" north of Schuylkill Ave.	"	"	3	6	49	
242	" at Jefferson	Old Mellert	"	1	6	37	
243	" north of Elm	New Mellert	"	3	6	31	
244	" between Buttonwood and L. V. R. R.	"	Intermediate	3	6	71	
245	" " Greenwich and Oley	Tamaqua	"	3	10	66	
246	" " Douglass and Windsor	"	"	3	10	53	

247	Front north of Bern.....	New Mellert	Low	3	6	56
248	Gilson alley southwest of Neversink.....	Galvin	"	3	6	50
249	Gordon north of Green.....	New Mellert	Intermediate	3	6	64
250	" " between Green and Greenwich.....	"	"	3	6	63
251	Grape east of Front.....	"	Low	3	6	59
252	Green west of Schuylkill Ave.....	"	Intermediate	3	6	60
253	" " " Weiser.....	"	"	3	6	58
254	" " at Fourth.....	Tamaqua	"	3	6	67
255	" " west of Cedar.....	New Mellert	"	3	8	68
256	" " " Ninth.....	"	"	3	8	69
257	" " at Twelfth.....	Tamaqua	"	2	6	33
258	" " at Thirteenth.....	"	Hampden	1	6	18
259	Greenwich at Second.....	New Mellert	Intermediate	3	16	76
260	" " west of Thorn.....	"	"	3	16	72
261	" " " Third.....	"	"	3	16	69
262	" " between Third and Fourth.....	"	"	3	16	66
263	" " west of Fourth.....	"	"	3	16	62
264	" " " Fifth.....	Tamaqua	"	3	16	65
265	" " " Church.....	Tamaqua	"	3	20	72
266	" " " Sixth.....	Tamaqua	"	3	20	85
267	Greenwich west of Twelfth.....	New Mellert	"	3	6	36
268	" " " Thirteenth.....	Tamaqua	"	3	6	19
269	Haak east of Seventeenth.....	New Mellert	Hampden	3	6	37
270	" " " Seventeenth-and-a-half.....	"	Intermediate	3	6	40
271	Hamilton street between Schuylkill Ave. and Jefferson.....	"	Low	3	4	47
272	Hiestor's Lane at Kutztown Road.....	Tamaqua	"	3	4	40
273	Hill Road between Perkionmen Ave. and Clymer.....	New Mellert	High	1	20	50
274	" " west of Lombard.....	"	"	3	6	125
275	" " east of Lombard.....	"	"	3	6	80
276	Hockley west of Gordon.....	Old Mellert	Intermediate	3	10	66
277	" " " Schuylkill Ave.....	"	"	3	4	88
278	" " " Front.....	Stileman	"	1	4	87
279	Hudson east of Second.....	New Mellert	"	1	4	69
280	Jefferson west of Hamilton.....	Old Mellert	Low	3	6	74
				1	4	45

# STATEMENT "I."—Continued.

SHOWING NUMBER, LOCATION, MAKE, ETC., OF ALL FIRE HYDRANTS THROUGHOUT THE CITY ON  
APRIL 5, 1897.

NUMBER.	LOCATION.	MAKE OR MAKER.	SERVICE.	NUMBER OF OUTLETS.	SIZE OF MAIN PIPE	PRESSURE AT PERSON IN
281	Kutztown Road at Bern.	Tamaqua	Low	3	16	44
282	" " between Bern and Richmond	Stileman	"	1	16	47
283	Lafayette at Clinton	Old Mellert	Intermediate	1	4	72
284	Lance Place between Oley and Douglass.	New Mellert	"	3	6	80
285	Laurel at Fourth.	Stileman	Low	1	4	59
286	" west of Pearl.	Corey	"	3	4	54
287	" east of Seventh.	New Mellert	"	3	16	53
288	" between Seventh and Neversink.	Stileman	"	1	4	51
289	" west of Neversink.	New Mellert	"	3	15	47
290	Lemon between Bingham and Chestnut	Galvin	"	3	6	40
291	" South of Cherry	Old Mellert	"	1	4	33
292	Linden south of Green	New Mellert	High	3	6	95
293	Locust at Walnut.	Stileman	Intermediate	1	4	42
294	Locust between Elm and Buttonwood	Old Mellert	"	1	4	40
295	" " Buttonwood and Green.	Stileman	"	1	4	40
296	" south of Windsor.	Tamaqua	"	1	6	53
297	" between Windsor and Spring.	"	"	3	6	55
298	" south of Marion.	New Mellert	"	3	6	60
299	Madison Ave. between Oley and Douglass	"	"	3	6	62
300	Maple between Cotton and South.	R. D. Wood & Co.	"	1	4	65
301	" " Spruce and Chestnut.	"	"	1	4	73
302	" " Chestnut and Franklin	Stileman	"	1	4	66



303	Marion east of Ninth.....	Tamaqua	Intermediate	2	6	80
304	" west of Mulberry.....	Galvin	"	3	6	75
305	" at Eleventh.....	Tamaqua	"	2	6	70
306	Miffin north of Pine.....	New Mellert	Low	3	6	61
307	" between Pine and Spruce.....	"	"	3	6	61
308	" Spruce and Chestnut.....	Stileman	"	1	4	59
309	Mineral Spring Road east of Clymer.....	New Mellert	Intermediate	3	16	30
310	" " between Clymer and Sixteenth.....	"	"	3	16	24
311	" " at Sixteenth.....	R. D. Wood & Co.	"	1	16	26
312	" " Park east of Miller's hotel.....	Tamaqua	"	2	16	28
313	Minor between Willow and South.....	Stileman	Low	1	4	60
314	" " and Laurel.....	Old Tamaqua	"	1	4	55
315	" north of Laurel.....	Stileman	"	1	4	48
316	" at Pine.....	"	"	1	3	64
317	Moss between Washington and Walnut.....	Old Mellert	Intermediate	1	4	62
318	" " Buttonwood and Green.....	Stileman	"	1	4	63
319	" north of Green.....	"	"	1	4	70
320	" " Greenwich.....	Old Mellert	"	1	4	72
321	" between Oley and Douglass.....	Galvin	"	3	6	80
322	" south of Spring.....	Tamaqua	Intermediate	3	6	82
323	" north of Robeson.....	Stileman	"	1	4	80
324	" at Marion.....	Old Mellert	"	1	4	78
325	" at Perry.....	"	"	1	4	74
326	" at Pike.....	Stileman	"	1	4	70
327	" north of Union.....	"	"	1	4	43
328	Muhlenberg at Orange.....	New Mellert	Intermediate	1	4	78
329	" at Maple.....	Tamaqua	"	3	6	73
330	" west of Thirteenth.....	"	"	1	6	70
331	" " Miller.....	"	"	3	6	65
332	" " " Miller.....	"	"	3	6	60
333	" " Fourteenth-and-a-half.....	New Mellert	"	3	4	51
334	Mulberry north of Court.....	"	"	3	4	53
335	" between Washington and Walnut.....	Stileman	"	1	4	55
336	" north of Green.....	Old Mellert	"	1	4	55

# STATEMENT "I."—Continued.

SHOWING NUMBER, LOCATION, MAKE, ETC., OF ALL FIRE HYDRANTS THROUGHOUT THE CITY ON  
APRIL 5, 1897.

NUMBER.	LOCATION.	MAKE OR MAKER.	SERVICE.	NUMBER OF OUTLETS.	SIZE OF MAIN PIPE	PERSON IN CHARGE	HYDRANT
337	Mulberry south of Greenwich.....	Stileman	Intermediate	1	4	58	
338	" " between Douglass and Windsor.....	New Mellert	"	3	6	67	
339	" " Perry and Pike.....	"	"	3	6	72	
340	Neversink opposite Eighth street bridge.....	Old Mellert	Low	1	3	49	
341	" " south of Eighth street bridge.....	R. D. Wood & Co.	"	1	4	50	
342	" " north of Laurel.....	New Mellert	"	3	16	48	
343	Nicolls north of Hewson.....	Old Mellert	Intermediate	1	4	81	
344	" " between Richard's and Spring..	"	"	1	4	81	
345	Ninth at South.....	"	"	1	4	66	
346	" " south of East Laurel.....	Stileman	"	1	4	77	
347	" " at Laurel.....	Old Mellert	"	1	4	86	
348	" " north of Culvert.....	"	"	1	4	47	
349	" " south of Spruce.....	Stileman	Low	1	6	40	
350	" " between Spruce and Bingham.....	"	Low	1	6	35	
351	" " south of Cherry.....	Old Tamaqua	Intermediate	1	6	66	
352	" " north of Court.....	New Mellert	"	3	6	63	
353	" " between Washington and Walnut.....	"	Low	3	6	31	
354	" " at Walnut.....	Old Mellert	"	1	6	32	
355	" " south of Elm.....	New Mellert	Intermediate	3	6	67	
356	" " at Buttonwood.....	Stileman	"	1	6	67	
357	" " between Buttonwood and Green.....	New Mellert	"	3	6	68	
358	" " Green and Greenwich.....	Stileman	"	1	6	72	



# STATEMENT "I."—Continued.

SHOWING NUMBER, LOCATION, MAKE, ETC., OF ALL FIRE HYDRANTS THROUGHOUT THE CITY ON  
APRIL 5, 1897.

NUMBER.	LOCATION.	MAKE OR MAKER.	SERVICE.	NUMBER OF OUTLETS.	SIZE OF MAIN PIPE	PRESSURE PER SQ. IN. AT HYDRANT
393	Pearl between Laurel and Bingham.	Old Mellert	Low	1	4	52
394	" " Bingham and Spruce.	Stileman	"	1	3	50
395	" " Chestnut and Franklin.	Tamaqua	"	2	6	48
396	Penn east of Front.	New Mellert	"	3	10	60
397	" between Front and Second.	Tamaqua	"	3	10	58
398	" west of Second.	New Mellert	"	3	10	56
399	" between Second and Third.	Stileman	"	1	12	52
400	" at Third.	New Mellert	"	3	12	49
401	" between Third and Fourth.	Stileman	"	1	12	47
402	" west of Fourth.	New Mellert	"	3	12	45
403	" between Fourth and Fifth.	Stileman	"	1	12	44
404	" " "	Galvin	"	1	12	44
405	" west of Fifth.	Old Tamaqua	"	3	12	43
406	" east of Fifth.	Galvin	"	3	12	43
407	" between Fifth and Sixth.	R. D. Wood & Co.	"	1	12	43
408	" " "	Stileman	"	1	12	42
409	" east of Sixth.	New Mellert	"	3	12	41
410	" between Sixth and Seventh.	Stileman	"	1	12	40
411	" at Seventh.	"	"	1	12	40
412	" between Seventh and Eighth.	"	"	1	12	36
413	" " Eighth and Ninth.	"	Intermediate	1	12	65
414	" " at Ninth.	"	"	1	12	62



# STATEMENT "I."—Continued.

SHOWING NUMBER, LOCATION, MAKE, ETC., OF ALL FIRE HYDRANTS THROUGHOUT THE CITY ON  
APRIL 5, 1897.

NUMBER.	LOCATION.	MAKE OR MAKER.	SERVICE.	NUMBER OF OUTLETS.	SIZE OF MAIN PIPE	PRESSURE AT HYDRANT
449	River Road north of Jefferson.....	Stileman	Low	1	4	61
450	" " at Buttonwood.....	"	"	1	4	60
451	Robeson west of Centre Ave.....	Tanaqua	Intermediate	1	6	30
452	Rose between Washington and Walnut.....	Stileman	Low	1	6	43
453	" " at Walnut.....	"	"	1	6	48
454	" " north of Elm.....	Tanaqua	"	3	6	47
455	" " south of Buttonwood.....	"	Intermediate	3	6	77
456	" " north of Windsor.....	Galvin	"	3	6	55
457	" " south of Spring.....	"	"	3	6	46
458	Rosenthal between Buttonwood and L. V. R. R.....	Tanaqua	"	3	6	66
459	Schuykill Ave. north of Jefferson.....	New Mellert	"	3	6	76
460	" " between Hockley and Buttonwood.....	Stileman	"	1	6	72
461	" " " Buttonwood and L. V. R. R.....	Old Mellert	"	1	6	65
462	" " " at Greenwich.....	"	"	1	6	60
463	" " " north of Oley.....	New Mellert	"	3	6	62
464	" " " at Douglass.....	"	"	3	6	70
465	" " " south of Windsor.....	Galvin	"	3	6	76
466	Second between Spruce and Chestnut.....	Stileman	Low	1	4	60
467	" " south of Grape.....	New Mellert	"	2	6	60
468	" " south of Cherry.....	Old Mellert	"	1	6	59
469	" " north of Court.....	"	"	3	16	59
470	" " between Washington and Walnut.....	New Mellert	"	3	6	51

471	Second between Walnut and Elm.....	New Mellert	Low	3	6	38
472	" " Elm and Buttonwood.....	"	"	3	6	35
473	" " Beach and L. V. R. R.....	Galvin	Intermediate	3	6	72
474	" " at Hudson.....	New Mellert	"	3	6	75
475	Seventh north of South.....	Galvin	Low	3	10	62
476	" between South and Willow.....	"	"	3	10	60
477	" north of Willow.....	Stileman	"	1	6	59
478	" between Willow and Laurel.....	New Mellert	"	3	16	56
479	" north of Pine.....	"	"	3	6	47
480	" at Spruce.....	Old Mellert	"	1	6	42
481	Sixth north of Canal.....	Stileman	"	1	6	61
482	" " Willow.....	"	"	1	6	57
483	" between Willow and Laurel.....	"	"	1	6	54
484	" north of Laurel.....	New Mellert	"	3	6	52
485	" between Laurel and Bingham.....	Old Mellert	"	1	6	50
486	" " Bingham and Spruce.....	"	"	1	6	49
487	" at Spruce.....	"	"	1	6	48
488	" south of Chestnut.....	Stileman	"	1	6	46
489	" between Chestnut and Franklin.....	Tamaqua	"	3	6	45
490	" north of Cherry.....	Old Mellert	"	1	6	43
491	" between Walnut and Elm.....	"	"	1	6	39
492	" " Elm and Buttonwood.....	"	"	1	6	42
493	" " Woodward and Greenwich.....	New Mellert	Intermediate	3	6	85
494	" " Ole and Douglass.....	Stileman	"	1	6	73
495	" north of Douglass.....	"	"	1	6	72
496	" between Douglass and Windsor.....	"	"	1	6	70
497	" " Windsor and Spring.....	"	"	1	6	65
498	" north of Marion.....	Tamaqua	"	1	6	62
499	" " Pike.....	"	"	1	6	67
500	" south of Union.....	New Mellert	"	3	6	72
501	Sixteenth north of Fairview.....	Galvin	"	3	6	25
502	" south of Cotton.....	"	"	3	6	52
503	" north of Haak.....	Tamaqua	"	2	10	38
504	Sixteenth-and-a-half north of Fairview.....	"	"	1	6	20

# STATEMENT "I."—Continued.

SHOWING NUMBER, LOCATION, MAKE, ETC., OF ALL FIRE HYDRANTS THROUGHOUT THE CITY ON  
APRIL 5TH, 1897.

NUMBER.	LOCATION.	MAKE OR MAKER.	SERVICE.	NUMBER OF OUTLETS.	SIZE OF MAIN PIPE	PRESSURE IN. AT HYDRANT
505	South between Canal and Minor.....	Galvin	Low	3	10	64
506	" 191 feet east of Seventh.....	"	"	3	10	59
507	" 360 feet east of Seventh.....	Old Mellert	"	1	6	55
508	" 599 feet east of Seventh.....	Galvin	"	3	10	49
509	Spring at front.....	Old Tamaqua	Intermediate	1	6	42
510	" west of Centre avenue.....	Tamaqua	"	2	6	39
511	" at Third.....	"	"	3	6	42
512	" at Fourth.....	"	"	3	6	51
513	" at Fifth.....	"	"	3	12	56
514	" west of Sixth.....	New Mellert	"	3	12	59
515	" " Eleventh.....	Tamaqua	"	1	12	67
516	" " Twelfth.....	"	"	1	12	50
517	Spring Garden north of Muhlenberg.....	Old Mellert	Low	1	4	45
518	Spruce at Water.....	New Mellert	"	3	6	63
519	" west of Schuylkill canal.....	"	"	3	6	62
520	" east of Canal.....	"	"	3	6	62
521	" west of Second.....	Old Mellert	"	1	6	61
522	" east of Mifflin.....	New Mellert	"	3	4	60
523	" west of Carpenter.....	Old Mellert	"	1	6	57
524	" " Wood.....	Stileman	"	1	6	54
525	" " Pearl.....	Galvin	"	3	6	50
526	" " Plum.....	Stileman	"	1	4	45



527	Spruce west of Maple.....	Stileman	Intermediate	1	4	75
528	" at Wunder.....	"	"	1	4	67
529	" west of Twelfth-and-a-half.....	New Mellert	"	3	6	57
530	" at Miller.....	Tamaqua	"	3	6	54
531	" east of Perkiouen avenue.....	"	"	1	6	46
532	Tenth at East Laurel.....	Old Mellert	"	1	4	49
533	" between Laurel and Cotton.....	Stileman	"	1	4	62
534	" north of Muhlenberg.....	"	"	1	6	80
535	" " Spruce.....	"	"	1	6	78
536	" " Chestnut.....	"	"	1	6	71
537	" " Cherry.....	Old Mellert	"	1	6	59
538	" " Court.....	Tamaqua	"	1	6	55
539	" south of Walnut.....	Stileman	"	1	6	60
540	" " Elm.....	Old Mellert	"	1	6	57
541	" at Green.....	Stileman	"	1	6	60
542	" between Green and Greenwich.....	"	"	1	6	62
543	" north of Greenwich.....	"	"	1	6	63
544	" south of Oley.....	"	"	3	6	70
545	" at Windsor.....	Tamaqua	"	2	6	71
546	" north of Spring.....	New Mellert	"	3	20	76
547	" at Robeson.....	Old Mellert	"	1	6	79
548	" at Marion.....	"	"	1	6	77
549	" south of Perry.....	"	"	1	6	75
550	" north of Pike.....	"	"	3	6	74
551	" at Amity.....	New Mellert	"	1	6	68
552	Third north of Canal.....	Tamaqua	Low	1	6	63
553	" between Canal and Pine.....	Old Mellert	"	1	4	62
554	" south of Pine.....	Old Tamaqua	"	1	4	61
555	" " Spruce.....	Old Mellert	"	3	6	60
556	" north of Grape.....	New Mellert	"	1	6	57
557	" at Franklin.....	R. D. Wood & Co.	"	1	6	55
558	" north of Cherry.....	"	"	1	6	51
559	" " Penn.....	"	"	1	6	48
560	" south of Court.....	Stileman	"	1	6	46

# STATEMENT "I."—Continued.

SHOWING NUMBER, LOCATION, MAKE, ETC., OF ALL FIRE HYDRANTS THROUGHOUT THE CITY ON  
APRIL 5, 1897.

NUMBER.	LOCATION.	MAKE OR MAKER.	SERVICE.	NUMBER OF OUTLETS.	SIZE OF MAIN PIPE	PRESSURE AT PERSON IN.
561	Third between Washington and Walnut	Old Mellert	Low	1	6	51
562	" north of Walnut	New Mellert	"	3	6	50
563	" between Walnut and Elm	"	"	3	6	48
564	" Buttonwood and L. V. R. R.	Stileman	Intermediate	1	6	77
565	" south of L. V. R. R.	New Mellert	"	3	6	75
566	" between L. V. R. R. and Greenwich	"	"	3	6	72
567	" north of Oley	Stileman	"	1	6	59
568	" at Douglass	"	"	1	6	56
569	" between Windsor and Spring	Old Mellert	"	1	6	48
570	Thirteenth at Kenney	Tamaqua	"	3	6	53
571	" at Spruce	"	"	2	6	55
572	Thorn at Court	Stileman	Low	1	4	52
573	" between Greenwich and Oley	Old Tamaqua	Intermediate	1	6	69
574	" north of Douglass	New Mellert	"	3	6	58
575	Tulpehocken between Hockley and Buttonwood	"	"	3	6	86
576	" north of Buttonwood	Stileman	"	1	6	81
577	" south of Lafayette	Galvin	"	3	6	71
578	" at Green	Tamaqua	"	3	6	69
579	Twelfth at South	R. D. Wood & Co.	"	1	6	48
580	" south of Franklin	Tamaqua	"	2	4	49
581	" between Buttonwood and Elm	New Mellert	"	3	6	30
582	" south of Robeson	Galvin	"	3	6	52

583	Twelfth north of Marion.....	Galvin	Low	3	16	14
584	" south of Perry.....	"	"	3	16	17
585	Union west of Centre avenue.....	Tamaqua	"	3	6	51
586	Walnut east of Front.....	New Mellert	"	3	10	43
587	" at Second.....	Tamaqua	"	1	6	43
588	" west of Thorn.....	New Mellert	"	3	6	46
589	" east of Fifth.....	"	"	3	10	38
590	" Church.....	"	"	3	10	38
591	" Sixth.....	"	"	3	10	37
592	" at Vine.....	"	"	3	10	34
593	" west of Seventh.....	"	"	3	10	33
594	" east of Seventh.....	Tamaqua	"	3	10	33
595	" west of Eighth.....	New Mellert	"	3	10	37
596	" Cedar.....	"	"	3	10	35
597	" east of Ninth.....	Tamaqua	Intermediate	3	10	68
598	" Moss.....	New Mellert	"	3	10	64
599	" Tenth.....	"	"	3	10	59
600	" Mulberry.....	"	"	3	10	54
601	Washington west of Pear.....	"	Low	3	16	56
602	" Second.....	"	"	3	16	58
603	" east of Third.....	Old Mellert	"	1	4	46
604	" Ash.....	New Mellert	"	3	6	42
605	" Church.....	"	"	3	6	39
606	" Sixth.....	"	"	3	6	38
607	" Seventh.....	"	"	1	4	35
608	" Poplar.....	Old Mellert	"	3	6	33
609	" west of Cedar.....	New Mellert	"	3	6	29
610	" Ninth.....	"	"	3	6	30
611	" Moss.....	Galvin	Intermediate	3	6	61
612	" Tenth.....	"	"	3	6	56
613	" Mulberry.....	"	"	3	6	51
614	" Eleventh.....	"	"	3	6	45
615	" "	Stileman	"	1	4	45
616	Water north of Bingham.....	New Mellert	Low	3	8	65

# STATEMENT "I."—Concluded.

SHOWING NUMBER, LOCATION, MAKE, ETC., OF ALL FIRE HYDRANTS THROUGHOUT THE CITY ON  
APRIL 5, 1897.

NUMBER.	LOCATION.	MAKE OR MAKER.	SERVICE.	NUMBER OF OUTLETS.	SIZE OF MAIN PIPE.	PRESSURE AT HYDRANT.
617	Willow west of Pearl.....	New Mellert	Low	3	16	57
618	" east of Pearl.....	Stileman	"	1	4	57
619	" west of Sixth.....	New Mellert	"	3	6	57
620	" at Minor.....	Old Mellert	"	1	4	58
621	" east of Minor.....	New Mellert	"	3	16	58
622	Windsor west of Pear.....	"	Intermediate	3	10	50
623	" " Thorn.....	"	"	3	6	52
624	" east of Third.....	"	"	3	8	54
625	" at Church.....	Old Mellert	"	1	8	68
626	" west of Mulberry.....	Tamaqua	"	3	6	66
627	" at Eleventh.....	"	"	3	6	63
628	" at Birch.....	Stileman	"	1	6	33
629	Wood between Chestnut and Franklin.....	Galvin	Low	3	6	51
630	" south of Cherry.....	Stileman	"	1	4	48
631	Woodward east of Fourth.....	New Mellert	Intermediate	3	4	71
632	" west of Centre avenue.....	Stileman	"	1	4	77

SUMMARY OF MAKE OF FIRE HYDRANTS IN USE APRIL 5,  
1897.

New Mellert.....	231
Stileman.....	114
Tamaqua.....	105
Old Mellert.....	97
Galvin.....	50
R. D. Wood & Co.....	20
Old Tamaqua.....	12
Adams.....	2
Corey.....	1
	<hr/>
	632
Total number of fire hydrants April, 1896.....	619
Total number of new fire hydrants placed during 1896-97.....	51
Number of new fire hydrants placed to replace old hydrants.....	30
Old fire hydrants taken out and not replaced...	8
	<hr/>
	38
Additional number April 5, 1897.....	13
	<hr/>
Total number of fire hydrants April 5, 1897....	632

## STATEMENT "J."

## REPORT OF THE OPERATIONS AT MAIDENCREEK PUMPING STATION.

Pump No. 1.

WORTHINGTON LOW DUTY.

29"x50 $\frac{1}{4}$ "x22 $\frac{1}{4}$ "x48"WM. H. KETCHLEY,  
Engineer.

MONTH.	No. of Revolu- tions.	Gallons of Water Pumped.	Rate of Pumping in 24 Hours.	Gallons Pumped per Pound of Coal.	Hours in Actual Oper- ation.	Coal Con- sumed in Pounds.	Dynamic Head.	Duty — lbs. Water Pumped x total Dynamic Head in ft. Coal Consumed in lbs. (No deduct. for ashes)	Cu. ft of Water Evaapor- ated.	Aver. Stroke.
1896.										
April.....		Pump	not	running.						
May.....		"	"	"						
June.....		"	"	"						
July.....	7,216	2,294,353	4,235,729	207.82	13	11,040	227	39,344,413	1,902	48
August.....		Pump	not	running.						
September.....	4,627	1,455,847	4,367,541	210.99	8	6,900	233	41,000,449	885	47 $\frac{1}{2}$
October.....		Pump	not	running.						
November.....		"	"	"						
December.....		"	"	"						
1897.										
January.....	74,737	23,762,895	5,092,049	253.96	112	93,570	235	49,773,323	10,730	48
February.....		Pump	not	running.						
March.....		"	"	"						
Totals.....		27,513,095			133	111,510			13,517	
Averages.....			4,964,769	246.73			235	48,357,022		

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## STATEMENT "J."—Concluded.

## REPORT OF THE OPERATIONS AT MAIDENCREEK PUMPING STATION.

## Pump No. 2.

WORTHINGTON HIGH DUTY.

30"x60"x26"x48"

WM. H. KETCHLEY,  
Engineer.

MONTH.	No. of Revolu- tions.	Gallons of Water Pumped.	Rate of Pumping in 24 Hours.	Gallons Pumped per Pound of Coal.	Hours in Actual Oper- ation.	Coal Con- sumed in Pounds.	Dynamic Head.	Duty — lbs. Water Pumped x 100 x Dynamic Head in ft. Coal Consumed in lbs. (No. deduct. for ashes)	Cu. ft. of Water Evapor- ated.	Aver. Stroke.
1896.				running.						
April.....		Pump	not	"						
May .....		"	"	"						
June.....		"	"	"						
July.....	123,712	54,483,496	6,025,824	381.76	217	141,973	263	84,107,394	16,900	49
August.....	200,601	88,345,866	5,825,002	396.24	364	222,660	260	85,852,190	23,986	49
September.....	295,596	130,182,225	6,126,222	374.54	510	347,577	264	84,399,258	42,827	49
October.....	209,615	92,315,685	5,430,334	386.87	408	238,624	255	82,209,179	28,071	49
November.....	65,927	29,034,641	5,486,861	389.58	127	74,520	255	81,784,704	8,139	49
December.....	86,270	37,993,818	5,771,213	421.23	158	90,198	258	90,561,769	10,190	49
1897.										
January.....	32,976	13,979,243	5,545,485	401.25	60½	34,839	256	85,663,058	3,811	48
February.....	78,312	34,497,876	5,925,118	409.82	139½	84,178	262	80,540,673	10,511	49
March.....	67,912	29,908,846	5,788,809	389.46	124	76,798	258	83,801,630	9,321	49
Totals.....		510,741,696		389.38	2,108	1,311,673			153,747	
Averages.....			5,814,896				259	84,108,822		

## STATEMENT "K."

GIVING RESULTS OF TESTS MADE OF THE PER CENT. OF ERROR IN METERS SET OR RESET DURING YEAR.

Date.	Kind.	Maker.	Number.	Size.	Dep't No.	Error.	+	REMARKS.
1896.								
April 7.....	Trident	Neptune Meter Co.	16126	$\frac{3}{4}$ in.	177		1.2 per cent.	New.
April 16.....	Thomson	"	46281	2 in.	67		2.2 per cent.	Old.—Test after repairs.
April 17.....	Crown	National	10430	$\frac{1}{2}$ in.	119	0.0 per cent.		Old.—Test after repairs.
April 23.....	Bec	Thomson	76024	$\frac{5}{8}$ in.	131		0.7 per cent.	New.
April 23.....	"	"	46540	$\frac{5}{8}$ in.	60	0.5 per cent.		Old.
May 1.....	Thomson	"	33239	$\frac{5}{8}$ in.	12	1.0 per cent.		Old.
May 1.....	Crown	National	147431	$\frac{5}{8}$ in.	186		0.8 per cent.	New.
May 1.....	Bec	Thomson	62339	$\frac{1}{2}$ in.	186	1.0 per cent.		New.
May 1.....	"	"	62340	$\frac{1}{2}$ in.	6	1.5 per cent.		Old.
May 1.....	"	"	62337	$\frac{1}{2}$ in.	87	1.6 per cent.		Old.
May 1.....	Gem	National	163340	2 in.	187		1.2 per cent.	New.
May 1.....	Crown	"	121836	$\frac{5}{8}$ in.	82	1.0 per cent.		Old.
May 3.....	"	"	136516	3 in.	182	0.2 per cent.		Old.
May 7.....	Bec	Thomson	76026	$\frac{5}{8}$ in.	198	0.7 per cent.		New.
May 7.....	"	"	76023	$\frac{5}{8}$ in.	189	0.1 per cent.		New.
May 7.....	"	"	33332	$\frac{3}{4}$ in.	100	1.1 per cent.		Old.
May 13.....	Crown	National	156045	$\frac{3}{4}$ in.	191	2.3 per cent.		Old. (Not set.)

May 15.....	Crown	National Meter Co.	139188	1 in.	192		1.2 per cent.	New.
May 27.....	"	"	"	1½ in.	194	0.5 per cent.	Old.	Old.
June 1.....	"	"	184551	2 in.	91	0.5 per cent.	Old.	Old.
June 2.....	"	"	184772	¾ in.	158		1.2 per cent.	Old.—Repaired.
June 3.....	Bee	Thomson	76827	¾ in.	195	0.3 per cent.	New.	New.
June 3.....	"	"	76828	¾ in.	196	0.6 per cent.	New.	New.
June 3.....	"	"	76826	¾ in.	197	1.1 per cent.	New.	New.
June 3.....	"	"	76829	1½ in.	198		0.3 per cent.	New.
June 18.....	Crown	National	139180	1 in.	199		0.3 per cent.	New.
June 18.....	"	"	167223	¾ in.	200	0.5 per cent.	New.	New.
June 18.....	"	"	147479	¾ in.	123		1.0 per cent.	Old.—Repaired.
June 18.....	Bee	Thomson	52344	¾ in.	165	0.3 per cent.	Old.—Repaired.	Old.—Repaired.
June 18.....	Columbia	Union Wat.	53139	¾ in.	201	1.2 per cent.	New.	New.
June 19.....	Crown	National	167227	¾ in.	202		0.3 per cent.	New.
June 19.....	"	"	167221	¾ in.	203		0.3 per cent.	New.
June 19.....	"	"	167222	¾ in.	204		0.3 per cent.	New.
June 30.....	"	"	139155	1 in.	205		0.3 per cent.	New.
June 30.....	Bee	Thomson	73170	2 in.	206		0.7 per cent.	New.
July 3.....	Crown	National	167219	¾ in.	207		1.2 per cent.	New.
July 6.....	"	"	136830	4 in.	208		1.0 per cent.	New.
July 6.....	"	"	136828	4 in.	209		1.5 per cent.	New.
July 6.....	"	"	136958	4 in.	210		0.9 per cent.	New.
July 9.....	Hersey	Hersey Man'g Co.	40722	¾ in.	193		0.7 per cent.	Old.—Repaired.

STATEMENT "K."—Continued.

GIVING RESULTS OF TESTS MADE OF THE PER CENT. OF ERROR IN METERS SET OR RESET DURING YEAR.

Date.	Kind.	Maker.	Number.	Size.	Dept No.	Error.		REMARKS.
						—	+	
1896.								
July 9.....	Crown	National Meter Co.	106647	¾ in.	212		0.1 per cent.	New.
July 13.....	Lambert	Thomson	81854	2 in.	213		0.9 per cent.	New.
July 13.....	"	"	81875	1½ in.	214		1.3 per cent.	New.
July 13.....	"	"	81876	1½ in.	215		1.2 per cent.	New.
July 15.....	"	"	81848	¾ in.	216	0.8 per cent.		New.
July 16.....	Crown	National	106646	¾ in.	217		0.2 per cent.	New.
July 18.....	"	"	166648	¾ in.	218		1.0 per cent.	New.
July 27.....	Bee	Thomson	53341	¾ in.	160	0.2 per cent.		Old.—Repaired.
Aug. 3.....	Lambert	"	81852	¾ in.	219	0.0 per cent.		New.
Aug. 6.....	"	"	81853	¾ in.	220		0.3 per cent.	New.
Aug. 6.....	Bee	"	53343	¾ in.	155	0.0 per cent.		Old.—Repaired.
Aug. 11.....	Crown	National Meter Co.	169703	1 in.	221	0.6 per cent.		New.
Aug. 13.....	"	"	130793	1 in.	88	0.0 per cent.		Old.
Aug. 13.....	"	"	169704	1 in.	222	0.3 per cent.		New.
Sept. 4.....	"	"	169705	1 in.	223	0.3 per cent.		New.
Sept. 7.....	"	"	14779	2 in.	224		1.7 per cent.	Old.
Sept. 9.....	Lambert	"	81851	¾ in.	225		0.2 per cent.	New.

Sept. 11.....	Crown	National Meter Co.	168393	1 1/2 in.	227		1.2 per cent.	New.
Sept. 19.....	"	"	166644	3/4 in.	228	0.3 per cent.		New.
Sept. 29.....	"	"	167226	5/8 in.	229		0.8 per cent.	New.
Oct. 21.....	"	"	124375	2 in.	41		0.3 per cent.	Old.—Repaired.
Oct. 27.....	Bee	Thomson	46277	2 in.	143		0.6 per cent.	Old.—Repaired.
Nov. 2.....	"	"	55943	2 in.	181			Old.—Repaired.
Nov. 10.....	Thomson	"	30547	1 1/2 in.	166	0.5 per cent.		Old.
Nov. 19.....	Hersey	Hersey Man'g Co.	51381	5/8 in.	231		1.2 per cent.	New.
Nov. 27.....	Bee	Thomson Meter Co.	46280	2 in.	21	0.3 per cent.		Old.—Repaired.
Dec. 9.....	Crown	National	136961	3 in.	292	0.4 per cent.		New.
Dec. 10.....	Hersey	Hersey Man'g Co.	51380	5/8 in.	233	0.7 per cent.		New.
Jan. 20.....	Gem	National Meter Co.	163240	2 in.	187		0.3 per cent.	Repaired.
Jan. 21.....	Crown	"	132761	5/8 in.	103	0.7 per cent.		Repaired.
Feb. 4.....	"	"	136514	3 in.	234	0.1 per cent.		New.
Feb. 8.....	Bee	Thomson	52343	3/4 in.	155		0.8 per cent.	Repaired.
Feb. 9.....	Lambert	"	81850	5/8 in.	230	1.0 per cent.		New.
Feb. 17.....	Union	Union Wat.	14552	2 in.		2.0 per cent.		Old.
Feb. 17.....	Crown	National	167221	3/4 in.	203	0.2 per cent.		Repaired.
Feb. 17.....	"	"	167220	5/8 in.	235	1.6 per cent.		New.
March 2.....	"	"	133052	3/4 in.	14	0.8 per cent.		Old.
March 6.....	Lambert	Thomson	81849	5/8 in.	236		0.5 per cent.	New.
March 6.....	Crown	National	166645	3/4 in.	237		0.3 per cent.	New.
March 10.....	"	"	132757	1 1/2 in.	30	1.5 per cent.		Old.

STATEMENT "K."—*Concluded.*GIVING RESULTS OF TESTS MADE OF THE PER CENT. OF ERROR IN METERS SET OR RESET  
DURING YEAR.

Date.	Kind.	Maker.	Number.	Size.	Dep't No.	Error.		REMARKS.
						—	+	
1897. March 17.....	Hersey Disc.	Hersey Man'g Co.	51383	$\frac{1}{4}$ in.	238	0.0 per cent.	0.0 per cent.	New.
March 22.....	Bee	Thomson Meter Co.	46283	2 in.	145	2.9 per cent.		Old.
March 22.....	Crown	National	16734	$\frac{5}{8}$ in.	239	1.5 per cent.		New.
April 2.....	Union	Union	52980	$\frac{5}{8}$ in.	240		0.8 per cent.	New.
April 3.....	Gem	National	178906	2 in.	243		0.3 per cent.	New.
April 3.....	"	"	178907	2 in.	242		0.6 per cent.	New.
April 3.....	"	"	178908	2 in.	244	0.3 per cent.		New.
April 3.....	"	"	178909	2 in.	245	0.0 per cent.	0.0	New.

# STATEMENT L.

TABLE SHOWING RAINFALL, FOR SEVENTEEN YEARS, 1880-1896.

[illegible]

# STATEMENT "M."

SHOWING WEIGHTS AND DIMENSIONS OF "FLANGE" CAST-IRON WATER PIPE IN USE BY THE  
WATER DEPARTMENT, READING, PA.

FANNING'S FORMULÆ USED.

Thickness of pipe-shell in inches (pressure per sq. in.  $\div 100$ )  $\times$  Diam. in inches  $\left[ 1 - \frac{\text{Diam.}}{100} \right]$   
for minimum weights.  $= .4$  (tensile strength of cast-iron, 18,000 lbs.)  $\div 333$

## CLASS D.-PRESSURE 75 LBS.

NOMINAL DIAMETER IN INCHES.	Thickness of Pipe Shell in Inches.	Nearest of an Inch.	Interior Diameter.	Nearest of an Inch.	Exterior Diameter.	Nearest of an Inch.	Radius of Fillet in Inches.	Diameter of Flange.	Thickness of Flange.	Diameter of Bolt Circle.	Number of Bolts	Size of Bolts, in Inches.	Length of Bolts in Inches.	Weight for Length of 12 Feet.	
														Max.	Aver. Min.
4	.418	4 <sup>1</sup> / <sub>2</sub>	4.026	4 <sup>1</sup> / <sub>2</sub>	4.862	4 <sup>1</sup> / <sub>2</sub>		13 <sup>1</sup> / <sub>2</sub>	9 <sup>1</sup> / <sub>2</sub>	7	4		2 <sup>1</sup> / <sub>2</sub>	257	247 237
6	.460	6 <sup>1</sup> / <sub>2</sub>	6.040	6 <sup>1</sup> / <sub>2</sub>	6.960	6 <sup>1</sup> / <sub>2</sub>		13 <sup>1</sup> / <sub>2</sub>	11 <sup>1</sup> / <sub>2</sub>	9	8		2 <sup>1</sup> / <sub>2</sub>	409	393 377
8	.502	8 <sup>1</sup> / <sub>2</sub>	8.054	8 <sup>1</sup> / <sub>2</sub>	9.058	9 <sup>1</sup> / <sub>2</sub>		13 <sup>1</sup> / <sub>2</sub>	13 <sup>1</sup> / <sub>2</sub>				2 <sup>1</sup> / <sub>2</sub>	589	566 543
10	.545	10 <sup>1</sup> / <sub>2</sub>	10.066	10 <sup>1</sup> / <sub>2</sub>	11.156	11 <sup>1</sup> / <sub>2</sub>		16 <sup>1</sup> / <sub>2</sub>	16 <sup>1</sup> / <sub>2</sub>	4	2		3	792	762 732
12	.587	12 <sup>1</sup> / <sub>2</sub>	12.080	12 <sup>1</sup> / <sub>2</sub>	13.254	13 <sup>1</sup> / <sub>2</sub>		19 <sup>1</sup> / <sub>2</sub>	19 <sup>1</sup> / <sub>2</sub>	6	2		3	1033	993 953
16	.671	16 <sup>1</sup> / <sub>2</sub>	16.106	16 <sup>1</sup> / <sub>2</sub>	17.448	17 <sup>1</sup> / <sub>2</sub>		23 <sup>1</sup> / <sub>2</sub>	23 <sup>1</sup> / <sub>2</sub>	2	6		3	1553	1493 1433
20	.755	20 <sup>1</sup> / <sub>2</sub>	20.134	20 <sup>1</sup> / <sub>2</sub>	21.644	21 <sup>1</sup> / <sub>2</sub>		27 <sup>1</sup> / <sub>2</sub>	27 <sup>1</sup> / <sub>2</sub>	25	20		3	2152	2069 1986
24	.840	24 <sup>1</sup> / <sub>2</sub>	24.160	24 <sup>1</sup> / <sub>2</sub>	25.840	25 <sup>1</sup> / <sub>2</sub>		32 <sup>1</sup> / <sub>2</sub>	32 <sup>1</sup> / <sub>2</sub>	29 <sup>1</sup> / <sub>2</sub>	20		3	2883	2772 2661
30	.966	30 <sup>1</sup> / <sub>2</sub>	30.202	30 <sup>1</sup> / <sub>2</sub>	32.134	32 <sup>1</sup> / <sub>2</sub>		38 <sup>1</sup> / <sub>2</sub>	38 <sup>1</sup> / <sub>2</sub>	36	28		4	4046	3928 3810
36	1.093	36 <sup>1</sup> / <sub>2</sub>	36.240	36 <sup>1</sup> / <sub>2</sub>	38.426	38 <sup>1</sup> / <sub>2</sub>		45 <sup>1</sup> / <sub>2</sub>	45 <sup>1</sup> / <sub>2</sub>	42 <sup>1</sup> / <sub>2</sub>	32		4	5537	5376 5215
40	1.177	40 <sup>1</sup> / <sub>2</sub>	40.268	40 <sup>1</sup> / <sub>2</sub>	42.622	42 <sup>1</sup> / <sub>2</sub>		50 <sup>1</sup> / <sub>2</sub>	50 <sup>1</sup> / <sub>2</sub>	46 <sup>1</sup> / <sub>2</sub>	36		5	6605	6413 6221
48	1.346	48 <sup>1</sup> / <sub>2</sub>	48.322	48 <sup>1</sup> / <sub>2</sub>	51.014	51 <sup>1</sup> / <sub>2</sub>		59 <sup>1</sup> / <sub>2</sub>	59 <sup>1</sup> / <sub>2</sub>	56	44		5	9095	8830 8565



# STATEMENT "M."

## CLASS E.-PRESSURE 150 LBS.

NOMINAL DIAMETER IN INCHES.	Thickness of Pipe Shell in Inches.	Nearest $\frac{1}{2}$ of an Inch.	Interior Diameter.	Nearest $\frac{1}{2}$ of an Inch.	Exterior Diameter.	Nearest $\frac{1}{2}$ of an Inch.	Radius of Fillet in Inches.	Diameter of Flange.	Thickness of Flange.	Diameter of Bolt Circle.	Number of Bolts.	Size of Bolts, in Inches.	Diameter in Inches.	Length of Bolts in Inches.	Max.	Aver.	Min.	Weight for Length of 12 Feet.
4	.457	1	3.948	3	4.862	4		9	1	7	4	2		2	280	269	258	
6	.520	1	5.940	5	6.960	6		11	1	9	8	3		3	460	442	424	
8	.581	1	7.896	7	9.058	9		13	1	11	8	3		3	676	650	624	
10	.643	1	9.870	9	11.156	11		16	1	14	12	3		3	928	892	856	
12	.705	1	11.844	11	13.254	13		19	1	16	12	3		3	1227	1180	1133	
16	.829	1	15.790	15	17.448	17		23	1	21	16	4		4	1906	1833	1760	
20	.953	1	19.738	19	21.644	21		27	1	25	20	1		1	2713	2609	2505	
24	1.077	1	23.686	23	25.840	25		32	2	29	20	1		1	3701	3559	3417	
30	1.266	1	29.602	29	32.134	32		38	2	36	28	1		1	5275	5121	4967	
36	1.449	1	35.528	35	38.426	38		45	2	42	32	1		1	7279	7067	6855	
40	1.572	1	39.478	39	42.622	42		50	2	46	36	1		1	8744	8489	8234	
48	1.820	1	47.370	47	51.014	51		59	2	56	44	1		1	12204	11849	11494	

## STATEMENT "N."

SHOWING AMOUNT OF STOCK ON HAND APRIL 5, 1897, USED  
FOR REPAIRS AND MAINTENANCE AND CONSTRUCTION.

## CAST IRON PIPE.

170 ft.—4-inch.	37 ft.—16-inch.
13 ft.—6-inch.	12 ft. 4 in.—20-inch.
38 ft.—8-inch.	33 ft. 4 in.—24-inch.
166 ft. 6 in.—10-inch.	Value .....\$299.90
5 ft. 6 in.—12-inch.	

## SPECIALS.

## TEES.

2—16X12.	4—10X6.
2—16X10.	3—8X6.
1—12X12.	1—6X4.
3—12X6.	1—6X3.
1—10X8.	Value .....\$171.66

## CROSSES.

2—20X20.	1—10X6.
1—20X12.	9—6X6.
1—16X16.	2—6X4.
1—16X6.	Value .....\$276.79
3—12X6.	

## OFFSETS.

1—10-inch.	Value .....\$8.77
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## Y BRANCHES.

1—20-inch.	
1—12-inch.	Value.....\$65.25

## BENDS.

1—16-inch $\frac{1}{4}$ Bend.	1—8-inch $\frac{1}{8}$ Bend.
1—16-inch $\frac{1}{8}$ Bend.	1—6-inch $\frac{1}{4}$ Bend.
2—10-inch $\frac{1}{4}$ Bend.	5—6-inch $\frac{1}{8}$ Bend.
4—10-inch $\frac{1}{8}$ Bend.	2—5-inch $\frac{1}{4}$ Bend.
1—8-inch $\frac{1}{4}$ Bend.	Value.....\$62.05

## REDUCERS.

8—20 to 12.	4—6 to 4.
5—12 to 6.	2—6 to 3.
4—10 to 8.	
1—10 to 6.	Value.....\$208.92

## SLEEVES.

2—30-inch.	1—10-inch Bolt Sleeve.
5—24-inch.	5— 8-inch.
5—20-inch.	3— 5-inch.
8—16-inch.	1— 4-inch Bolt Sleeve.
3—12-inch.	1— 3-inch.
1—12-inch Bolt Sleeve.	
5—10-inch.	Value.....\$320.78

## A. P. SMITH PAT. SLEEVES.

2—16x10 Double.	4—1cx6 Single.
1—16x6 Double.	5—8x6 Single.
1—16x6 Single.	1—6x3 Single.
6—12x6 Single.	Value.....\$193.20

## CAPS.

1—20-inch.	19—6-inch.
4—16-inch.	4—4-inch.
2—12-inch.	Value .....\$44.58
2—10-inch.	

## PLUGS.

1—10-inch.	1—4-inch.
4—6-inch.	Value .....\$2.70

## GATE BOXES AND RINGS.

1 S. C. box and ring.	1 large manhole top.
1 lower half box.	1 handhole box.
1 large lid.	Value .....\$48.95.

## GATES.

1—24-inch Rensselaer.	1—6-inch Mellert.
1—20-inch Rensselaer.	2—6-inch Douglass&Connard.
3—16-inch Rensselaer.	1—3-inch Douglass&Connard.
5—12-inch Rensselaer.	1—10-inch pressure regulator.
2—10-inch Rensselaer.	6—6-inch Smith fitting.
3—8-inch Rensselaer.	1—3-inch Smith fitting.
10—6-inch Rensselaer.	2—2-inch Smith fitting.
5—4-inch Rensselaer.	Value.....\$1,167.25

## FIRE HYDRANTS.

3 No. 7 New Mellert.	
4 Stileman (old).	Value .....\$127.00

## LEAD AND OAKUM.

760 lbs. pig lead.	91 lbs. oakum.
900 lbs. scrap lead.	Value .....\$57.36

## METERS.

1—3-inch Crown.	1— $\frac{3}{4}$ -inch Hersey.
2—1 $\frac{1}{2}$ -inch Crown.	1—3-inch Thomson.
3—1-inch Crown.	1—2-inch Bee.
1— $\frac{3}{4}$ -inch Crown.	1—2-inch Lambert.
3— $\frac{5}{8}$ -inch Crown.	1— $\frac{5}{8}$ -inch Lambert.
1—2-inch Hersey.	16 sets couplings.
1—1-inch Hersey.	Value .....\$675.65

## WROUGHT IRON PIPE AND FITTING.

Value .....\$32.37

## MISCELLANEOUS.

6,000 brich.	3—6-inch wrought iron straps.
20 $\frac{2}{3}$ lbs. cement.	2—4-inch wrought iron straps.
1—10-inch wrought iron strap.	Value .....\$87.43
Total value of material on hand.....\$3,849.61	

## STATEMENT "O."

## SCHEDULE OF WATER RATES IN EFFECT APRIL 1ST, 1897.

## DWELLINGS.

## PER ANNUM.

Hydrants in yard and kitchen or either.....	\$ 4 50
For each additional family, from same faucet.....	2 50
For each additional family, with separate faucet for each	4 50
One bath tub.....	2 50
For each additional bath.....	2 00
Stationary wash stand in excess of one.....	1 00
Each additional one.....	50
Water closets each.....	2 00
Urinals each.....	1 00
Wash pavements, of every description.....	3 00
Permission to sprinkle streets.....	4 00
Wash pavements, direct connection with main.....	4 00
[A screw nozzle to the hydrant in the yard, or a section of hose on the premises, is considered a wash pavement, unless there is a wash pavement charge to the dwelling.]	
In streets where main pipes are not laid, each family using city water obtained from hydrants elsewhere (transient) .....	2 50
Automatic cellar drains, each.....	3 00
Automatic air pumps, each.....	3 00

STORES.	PER ANNUM.
Store and dwelling, if occupied by the same parties.....	\$ 5 50
Store room with one attachment.....	3 00
Store room, each additional attachment....	1 00
Store rooms without attachments.....	1 00
Water closet used as a closet and urinal, each.....	3 00
Urinal.....	3 00
Urinal, constant running.....	10 00

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## OFFICES, FACTORIES AND PUBLIC BUILDINGS.

Hydrants, each.....	5 00
Each basin.....	2 00
Each sink.....	3 00
Water closets of every description, each.....	3 00
Urinals, self closing, each.....	3 00
Offices, without attachment.....	1 00
Urinals, constant running.....	10 00

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## HOTELS AND RESTAURANTS.

Hydrants, family keeping hotel or restaurant.....	4 50
First-class bars.....	10 00
Second-class bars.....	5 00
Wash-basins, each.....	2 00
Slop sinks, each.....	3 00
Water closets of any description, each.....	5 00
Urinals, self-acting, each.....	3 00
Urinals of other descriptions, each.....	10 00
One bath for use of boarders.....	6 00
Each additional bath.....	5 00
Kitchen according to capacity and number of draw cocks.....	\$5 to 25 00
Horse trough on pavement, with float cocks.....	5 00
Horse trough on pavement, without float cocks.....	25 00
Beer pumps, first-class.....	10 00
Beer pumps, second-class.....	7 50

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## FOUNTAINS.

Fountains, either in public or private yard, to be rated according to opening and pressure.	\
Lawn sprinklers (from April to October), each.....	5 00
Fish tanks.....	10 00

STABLES.	PER ANNUM.
Hydrants, not exceeding 5 stalls.....	\$5 00
Exceeding 5, per stall occupied (average).....	1 00
Without attachment, per stall.....	1 00
Screw nozzle in stable.....	3 00
Each vehicle.....	50

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BAKERIES.

Bakeries, with one faucet.....	5 00
Each additional faucet.....	3 00
Bakeries without faucet, in addition to dwelling charge..	3 00

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BARBER SHOPS.

One basin, with attachment.....	3 00
One basin, without attachment.....	1 00
Each additional basin, with or without attachment.....	1 00

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PHOTOGRAPH GALLERIES.

Each gallery, minimum charge.....	10 00
Each transient photographer.....	\$1.00 per day

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DRUG STORES.

Each store.....	\$5 to 8 00
Counter fountain, not exceeding $\frac{1}{8}$ inch nozzle, per season.....	5 00

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PUBLIC BATHING ESTABLISHMENTS.

Baths, each tub.....	6 00
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BLACKSMITH SHOPS.

First fire.....	1 00
Each additional fire.....	50

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BRICK YARDS.

Each hydrant (not more than 3 tables of one hydrant)..	5 00
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BUILDING PURPOSES.	PER ANNUM.
One-story building, for each 1600 sq. feet or fraction thereof of space occupied.....	\$1 00
Two-story building, for each 1600 sq. feet or fraction thereof of space occupied.....	1 50
Three-story building, for each 1600 sq. ft. or fraction thereof of space occupied.....	2 50
Four-story building, for each 1600 sq. feet or fraction thereof of space occupied.....	3 50
All buildings larger than five stories, for each 1600 sq. feet or fraction thereof of space occupied.....	5 00

## STEAM AND GAS ENGINES.

High pressure steam engines, per horse power, per day of 12 hours or under.....	1 50
Manufacturing establishments, and all others not enumerated, rated according to amount of water used.	
Gas engines, with return system.....	1 00
Gas engines, without return system.....	25 00

## METER RATES.—Per 1000 Gallons.

First	1,000 gallons, or less, per month.....	.50
Next	2,000 " " " " " ".....	.25
"	2,000 " " " " " ".....	.20
"	5,000 " " " " " ".....	.12
"	10,000 " " " " " ".....	.08
"	10,000 " " " " " ".....	.06
"	20,000 " " " " " ".....	.05
"	50,000 " " " " " ".....	.04½
"	100,000 " " " " " ".....	.04
"	300,000 " " " " " ".....	.03¼
"	500,000 " " " " " ".....	.03
"	2,000,000 " " " " " ".....	.02¾
Over	3,000,000 " " " " " ".....	.02½

When meters fail to register, an estimated bill on the previous consumption will be rendered according to the above rates.

## PENALTIES.

For wilfully injuring the pipe or conduit.....	5 00
For wasting water.....	5 00
For allowing water to leak from a common pipe used by several parties, each party liable for above penalty.	

For sprinkling street with a hose without permit.....	\$5 00
For introducing a ferrule into a public or private pipe without a permit.....	5 00
For using a larger ferrule than specified in permit.....	5 00
For every day's continuous use of such pipe after con- viction.....	1 00
For any opposition to the Superintendent in the dis- charge of his duties.....	10 00
For allowing waste of water after being notified.....	
.....Water to be shut off	
For letting on the water before repairs are made.....	5 00
For using fire hydrant without permission.....	5 00
For making any attachment to private pipe without permit.....	5 00
No permit to be issued for water until the owner gives consent in writing.	

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## STATEMENT "P."

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### SUMMARY OF STATISTICS ; COMPILED AS PER FORM AGREED UPON BY THE NEW ENGLAND WATER WORKS ASSOCIATION.

#### CITY OF READING, BERKS CO., PA.

Population by census of 1890.....	58,926
Date of acquisition by the City.....	1865
Owned by.....	City
Sources of Supply—Antietam, Bernhart, Egelman and Maiden Creeks, Hampden Springs and Hampden Drift.	
Mode of Supply—All sources are gravity supplies, except Maidencreek, which is pumped to Hampden Distributing Reservoir.	



## PUMPING.

1. Builders of pumping machinery—Henry R. Worthington.
  2. Description of coal used—
    - a Kind.....Anthracite
    - c Size.....Pea
    - d Brand.....Locust Mountain
    - e Price per gross ton delivered.....\$2.50
    - f Percentage of ash.....20.3 per cent.
  3. Coal consumed for the year in pounds.....1,668,000.
  4.  $\frac{\text{Pounds of wood consumed}}{3} = \text{coal in pounds} \dots\dots\dots 1,500$
  5. Total fuel consumed for year (3)  $\div$  (4) in pounds,  
1,669,500
  6. Total pumpage for year in gallons.....538,254.791
  7. Average Static Head against which pumps work,  
213.0 feet.
  8. Average Dynamic Head against which pumps work,  
258 feet.
  9. Number of gallons pumped per pound of coal (3), 322.69
  10. Duty using following formulae, making no deductions for starting or banking fires, heating buildings, or anything else.
- $\text{Duty} = \frac{\text{Gallons pumped (6)} \times 8.34 \times 100 \times \text{dynamic head (8)}}{\text{Total fuel consumed (5)}} = 69,372,483$

COST OF PUMPING, FIGURED ON PUMPING STATION EXPENSES, VIZ.: \$4,533.38.

11. Per million gallons raised against dynamic head into reservoir, \$8.42.
12. Per million gallons raised one foot high (dynamic), \$0.0326.

COST OF PUMPING, FIGURED ON TOTAL MAINTENANCE (CC.) VIZ.: \$65,628.52.

[Taking cost of total maintenance (cc) will not give a fair comparison with water works systems supplied entirely by pumps, since we pump but 24.4 per cent of our total supply.]

13. Per million gallons raised against dynamic head in reservoir, \$121.93.
14. Per million gallons raised one foot high (dynamic), \$0.4726.

# FINANCIAL. MAINTENANCE.

RECEIPTS.	EXPENDITURES.
From Consumers:	AA—Management and re-
A, B and C—Water rates, domestic and manuf'g... \$125,008 41	pairs..... \$36,840 52
D—Miscellaneous,	BB—Interest on bonds..... 21,288 00
From rents of real estate..... \$141 00	Paid to Sinking Fund..... 7,500 00
From penalties..... 448 54	CC—Total maintenance for year..... \$65,628 52
From fines..... 15 00	DD—Balance carried forward to construction..... 61,397 78
From Miscellaneous..... 507 46	
	1,111 90
K—Total..... \$126,120 40	
From Public Funds?	
F—Hydrants..... \$ 0 00	
G—Fountains..... 0 00	
H—Street watering.. 905 90	
I—Public buildings.. 0 00	
J—General appropriation..... 0 00	
	905 90
K—Gross Receipts from all sources..... \$127,025 30	EE—Total..... \$127,026 30

RECEIPTS.	EXPENDITURES.
From balance of previous fiscal year..... \$5324 54	FF—Extension of mains..... \$10,070 85
Deduct error in hydrant stock..... 414 00	GC—Corporation cocks..... 1,210 79
	HH—General improvements to supplies, distribution system, etc..... 52,634 75
Cash..... \$4910 54	II—Total construction for year \$63,916 39
	JJ—Balance, Stock..... \$3849 61
From DD..... \$11,155 15	Cash..... 9206 88
S—Bonds issued..... 61,397 78	
T—Appropriation from tax levy..... 0 00	13,056 49
U—Frontage tax and corporation cocks..... 4,419 95	
V—Total..... \$76,972 88	KK—Total..... \$76,972 88
W—Net cost of works to date..... \$1,684,601 77	
X—Bonded debt at this date..... 532,500 00	
Y—Value of Sinking Fund at this date..... 37,770 00	
Z—Rate of interest..... 4 per cent.	

## CONSUMPTION.

1 Estimated total population at date.....	73,000
2 Estimated population on lines of pipe to date.....	72,500
3 Estimated population supplied at date.....	72,900
4 Total gallons consumed for year.....	2,197,457.160
5 and 6 Passed through meters, 401,424,152 gallons or 18.21 per cent.	
7 Average daily consumption in gallons.....	6,020,431
8 Gallons per day to each inhabitant (1).....	82.5
9 Gallons per day to each consumer (3).....	82.6
10 Gallons per day to each tap (distribution 22).....	412.9

## DISTRIBUTION.

MAINS.		SERVICES.	
1—Kind of pipe used.....	Cast iron	16—Kind of pipe used,	Lead, wrought and cast iron
2—Size.....	From 1½ to 30 inches	17—Size.....	From ½ inch to 8 inches
3—Extended.....	1.64 miles	18, 19, 20, 23, 24—Not known as services are	not put in or owned by the department
4—Discontinued.....	3,343 feet	21—Service taps added.....	435
5—Total now in use.....	96.21 miles	22—Number now in use (estimated)	14,580
6—Cost of repairs per mile,		25—Meters added.....	63
Maint. gates and gate		26 (a and b)—Number now in use.....	230
boxes.....	\$974 45		
Repairs to fire hydrants	158 67		
Replacing fire hydrants,	2598 83		
Leaks on pipe lines.....	886 51		
Total for 96.21 miles.....	\$4618 46		
or \$48.00 per mile.			
7—Number of leaks per mile.....	0.82		
8—Small distribution pipes less			
than 4 inches, total length.....	6917 ft.		
9—Hydrants added.....	13		
10—Number now in use.....	632		

## STATEMENT "Q."

REPORT OF THE CITY ENGINEER AND SUPERINTENDENT AND  
ENGINEER OF THE WATER DEPARTMENT, ON A NEW  
PUMPING MAIN FROM THE MAIDENCREEK  
PUMPING STATION.

SEPTEMBER 22, 1896.

*To the Board of Water Commissioners :*

GENTLEMEN :

In accordance with a resolution passed by your honorable bodies on May 19, 1896, requesting the City Engineer to survey several routes and make plans and profiles of same, for a new line of pipe from the Maidencreek Pumping Station to the Bernhart Dam, and requesting the City Engineer and the Superintendent and Engineer of the Water Department to confer with each other as to the manner of operating the new line in conjunction with the old and the size and location of new main, together with an estimated cost of same, we beg leave to submit the following plans and report :

The water furnished the City at the present time is supplied through three principal systems, called the high, intermediate and low services. Each service, when completed, will give not less than thirty pounds pressure per square inch at the street surface in the highest point of the service. The reasons for

dividing the City into districts of different services are : First, to give a serviceable pressure in all parts of the City . and second, to utilize the entire supply of the different storage dams,

The low service district at present is partially fed from the Bernhart dam and the Penn Street distributing reservoirs ; the balance of the water necessary to supply this district is at present taken from the intermediate service, which receives its water from the Maidencreek pumping station, Antietam lake, and Hampden distributing reservoir.

The water taken into the low service from the intermediate service is therefore pumped 67.85 feet higher than necessary, and in order to save this continual expense of raising the water to said additional height, and to accommodate the increase in consumption, it is deemed necessary to pump into the Bernhart dam. This necessitates laying a new pumping main from the Maidencreek to the Bernhart dam.

The old pumping main laid from the Maidencreek to the Hampden Reservoir is not able to withstand the pressure of pumping at the rate of 10,000,000 gallons daily ; we therefore recommend your Board to utilize as much of the present main as practicable for the pumping main to Bernhart Dam and to lay a new line of pipe from the Pumping Station to the city for the intermediate service.

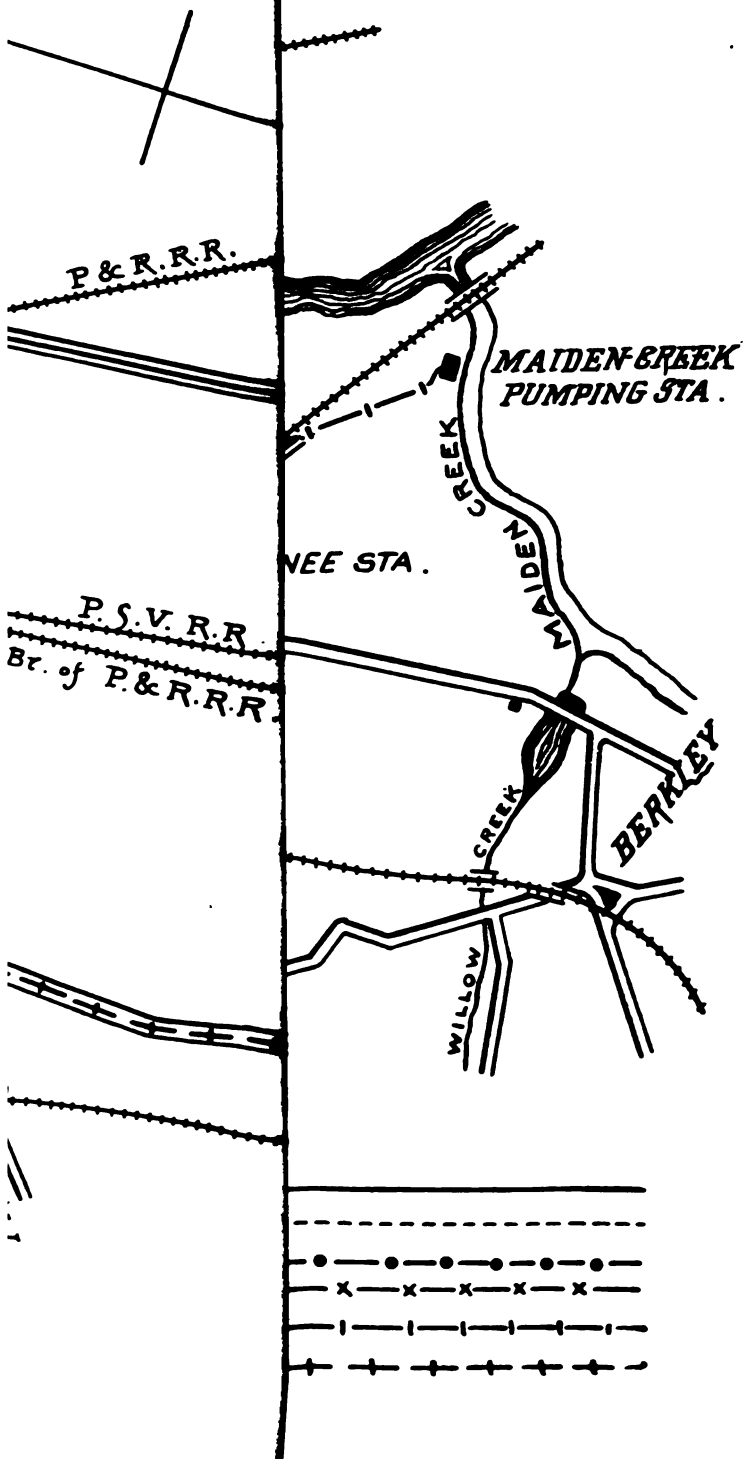
To determine the capacity of the new pumping main, we have assumed that the main should be large enough to supply the intermediate and high services with sufficient water for the maximum consumption, when the entire territory embraced in these districts is built up. The estimated population in these districts will be about 116,000, requiring water at the maximum rate of about 150 gallons per head per day, making a maximum daily consumption at the rate of 17,400,000 gallons. In these districts about 3,000,000 gallons per day can be relied upon from the Antietam, Egelman and Hampden Springs supplies, leaving 14,400,000 gallons to be pumped. The amount to be pumped seems adequate, as it is not probable that both the distributing reservoirs and the Antietam supply would be out of service at the same time.

We therefore recommend laying a pipe to the city from the Pumping Station, capable of delivering economically 15,000,000 gallons of water per day.

The next question to determine is the size of the new main.

In determining this we have compared the cost of fuel for raising 15,000,000 gallons of water per day to the additional height due to the differences in friction between a small and

PLATE 3.





large pipe as against the interest charge on the difference in cost between a small and large pipe at the rate of 4 per cent.

Comparing therefore a pipe line of 30 inches diameter with a pipe line of 36 inches diameter, having a length of 27,800 feet and pumping at the rate of 15,000,000 gallons per day, the friction head of a 30-inch line would be 67.6 feet and of the 36-inch line 26.1 feet, making a difference in favor of the 36-inch line of 41.5 feet, or a saving of coal per year to the amount of \$2,368.75, taking the cost of coal in boilers at \$2.50 per net ton, and assuming the duty of pump at 100,000,000 foot pounds per 100 pounds of coal. The operating expenses we assume to be the same in each case.

The difference in cost of constructing the lines of 30 and 36-inch pipe is estimated at \$46,148.00, taken at 4 per cent. interest would make \$1,845.92 as the interest charge on additional cost of the 36-inch line.

Thus we see that if a 30-inch line is built it will cost annually \$2,368.75, and the 36-inch line \$1,845.92, making a difference in favor of the 36-inch line of \$522.83 annually.

Comparing a pipe line of 36 inches in diameter with one 40 inches in diameter, having a length of 27,800 feet, and pumping at the rate of 15,000,000 gallons per day.

The friction head of the 36-inch line would be 26.1 feet, and of the 40-inch line 14.9 feet, making a difference in favor of the 40-inch line of 11.2 feet; or a saving of coal per year to the amount of \$639.20, by using the same conditions as in last comparison. The difference in cost of constructing the lines of 36-inch and 40-inch pipes is estimated at \$38,642.00, taken at 4 per cent. interest, would make \$1,545.68 as the interest charge on the additional cost of 40-inch line. Thus we see that if the 36-inch line is built it will cost annually \$639.20, and the 40-inch line \$1,545.68, making a difference in favor of the 36-inch line of \$906.48 annually.

We therefore recommend, that a 36-inch line be adopted for the new line.

In order to determine the location, surveys and estimates have been made of three routes.

The route designated as Route No. 1 contemplates the laying of a line of 36-inch pipe from the Pumping Station parallel to the present main, to the cross road to Bernhart dam; then still a 36-inch line in the ditch occupied at present by the 24-inch line to Sixth and Richmond. It also contemplates taking up the 24-inch line from the cross road to Bernhart dam to Sixth and Richmond streets, and laying the same and addi-

tional new pipe to the Bernhart dam from the Centre turnpike and the cross road.

Route No. 2 contemplates laying a line of 36-inch pipe from the Pumping Station, parallel to the present line, to the Cross Keys hotel, thence east along the Cross Keys road to the road leading from Temple to Berkley, thence along said road to the Kutztown road, and thence along the Kutztown road to Hiester's lane. It also contemplates taking up the pipe from Sixth and Richmond streets to the cross roads and Centre turnpike, and relaying same on the cross road to Bernhart dam.

Route No. 3 is similar to route No. 2, but contemplates running across private property, instead of on roads, from Cross Keys to Kutztown road and Laurel Run road.

The cost of route No. 1 :

24,035 ft. of 36-inch pipe @ \$6.49.....	\$155,987 15
5,800 ft. of 24-inch pipe taken up and relaid @ 88c	5,104 00
2,050 ft. of 24-inch pipe new @ \$3.47.....	7,113 50
Add for rock to be encountered on this route.....	2,811 00

Total cost..... \$171,015 65

The cost of route No. 2 :

27,763 ft. of 36-inch pipe @ \$6.49.....	\$180,181 87
5,800 ft. of 24-inch pipe taken up and relaid @ \$1.20.....	6,960 00
2,050 ft. of 24-inch pipe new @ \$3.47.....	7,113 50

Total cost..... \$194,255 37

Route No. 3 shortens route No. 2 2,862 feet of 36-inch pipe @ \$6.49 per foot, making a difference in cost of \$18,574.38, or a total cost of \$175,680.99. This route goes through considerable private property, and the cost of the right of way will increase this amount considerable.

Route No. 1 is estimated to cost \$4,665.34 less than route No. 3, provided the right of way is procured gratis on this latter route, and is \$23,239.72 cheaper than route No. 2.

Should the new line be built parallel to the old line, we would recommend laying this within about 18 inches of the old line, in order that any leaks existing on the old line could be found and repaired with little expense.

This seems a very important thing to do, as we have lately found all joints pushed out on the old line in 18 joints that were uncovered.

In consideration of the cost and the facility for examining the old line, we recommend that Route No. 1 be adopted.



We desire to call your attention to four facts that induced us to recommend the taking up of the 24-inch main on Centre Turnpike and Richmond street.

*First*.—Should any of the lines proposed be built, there will be no use for the 24-inch pipe other than a distribution pipe, and as such it would not be economical to let it remain.

*Second*.—When the consumption requires the full capacity of the 36-inch main, it will be necessary to lay another 36-inch line as a matter of safety, in case one line breaks, and in this case the 24-inch line would be of no use.

*Third*.—The lead joints of the 24-inch line are also badly strained and need much attention to put them in good condition.

*Fourth*.—The taking up of the line reduces the cost of the new line considerable.

The new line was designed only to Sixth and Richmond streets, to meet the requirements for the near future. As it becomes necessary the line can be extended to the reservoir.

In conclusion we wish to recommend that all the pipes and specials about the Pumping Station be replaced with flanged joints.

Very respectfully submitted,

E. CHAMBERLAIN, *City Engineer.*

EMIL L. NUEBLING, *Supt. and Engineer..*

### STATEMENT "R."

REVISED STATEMENT SHOWING THE CAPACITY OF THE  
WATER WORKS SYSTEM, ALSO AMOUNT OF WATER  
RECEIVED FROM EACH SOURCE.

#### STORAGE CAPACITY OF RESERVOIRS.

	Galions.
Antietam Lake (Ohlinger), storage capacity.....	101,000,000
Bernhart Reservoir, storage capacity.....	42,000,000
City Reservoirs, Penn street, storage capacity.....	5,800,000
Hampden reservoir, storage capacity.....	29,180,000
Egelman Reservoir, storage capacity.....	2,500,000
Buttonwood street, storage capacity.....	1,022,000

Total storage capacity..... 181,532,000

#### MAIDENCREEK PUMPING STATION.

One 5,000,000 gallon Worthington pump, one 10,000,000 gallon Worthington pump.

The Maiden creek supply is pumped to the Hampden distribution reservoir through 11,687 feet of 30-inch and 22,048 feet of 24-inch pipe, against an average static head of 213 feet. While it is possible to force 10,000,000 gallons daily through this main, it is considered safer to restrict it to 8,000,000 gallons, and this is all that can be relied on from this source as long as the present main is to do the work.

#### MAXIMUM CAPACITY OF SUPPLY MAINS IN 24 HOURS.

Antietam main will deliver.....	3,650,000
Bernhart " " " .....	2,100,000
*Egelman " " " to Buttonwood St. Reservoir.....	1,250,000
Hampden Springs main will deliver.....	80,000
Drift at Hampden Reservoir will deliver.....	16,000
<hr/>	
Total maximum daily supply from gravity system	7,096,000
Maiden creek pumping main will deliver.....	8,000,000
<hr/>	
Total maximum daily supply from all sources.....	15,096,000

\*The Egelman main will deliver more water than the Dam and drainage area can supply. The main was made large to accommodate fire service.

Amount of water received from the several sources of supply in gallons.

SOURCE.	GALLONS DELIVERED.	PER CENT.
Antietam.....	963,288,656	43.7
Bernhart.....	621,702,859	28.2
Maiden creek.....	538,254,791	24.4
Egelman.....	53,335,217	2.4
Hampden Springs.....	22,318,446	1.0
Hampden Drift.....	5,843,018	.3
Total gallons supplied to distributing reservoirs.....	2,204,742,987	100.0
Amount stored in distributing reservoirs on April 1, 1897, in excess of amount stored on April 1, 1896.....	7,285,827	
Total number of gallons consumed April 1, 1896 to April 1, 1897.....	2,197,457,160	
Daily average consumption.....	6,020,431 gallons	
Highest daily consumption occurred on July 20th, 1896...	7,883,000 gallons	
Lowest daily consumption occurred on Sunday, April 5th, 1896.....	4,141,000 gallons	

REPORT  
OF THE  
CHIEF CLERK OF THE DEPARTMENT OF WATER,  
From April 6, 1896, to April 5, 1897.

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OFFICE OF THE CHIEF CLERK  
OF THE DEPARTMENT OF WATER.

READING, PA., April 20th, 1897.

*To the Board of Water Commissioners of the City of Reading:*

GENTLEMEN :

I herewith present a report of the work performed in this office during the fiscal year beginning April 6, 1896, to April 5, 1897. The work is classified as follows :

STATEMENT "1." Showing number and size of main attachments granted during the year ; also total area of each size, and grand total area of all sizes issued since 1868.

STATEMENT "2." Showing by districts total number and kind of private attachments or services in use on April 5th, 1897 ; also total horse power, the number and kind of service attachments issued from April 6, 1896, to April 5, 1897.

STATEMENT "3." Showing by districts the name, location and amount of water rent paid by consumers specially rated, those paying horse power service, and water furnished free.

STATEMENT "4." Showing names and location of consumers supplied by meter measurement, size, make, when placed, the total consumption of water and the revenue derived from this source.

By comparing the total consumption of water used through meters from April 1, 1896, to April 1, 1897, with the previous year, there was an increase of 306,700 cubic feet or 2,294,275 gallons, increasing the revenue \$1,724.41. The average revenue received per 1,000 gallons was \$0.0404, showing an increase of \$0.0042 over the previous year, which is due to the slight increase of the meter rates which went into effect April 1, 1896.

STATEMENT "5." Showing the amounts collected from dwellings and manufactories, building purposes and street sprinkling.

Comparing the amount collected for the fiscal year 1895-'96, which was \$125,898.05, with the amount collected this year, \$125,751.74, you will find a decrease of \$146.82, which, (considering the number of people out of employment during the year), is no fault of the Department.

STATEMENT "6." Showing by months the amounts received and paid to the City Treasurer for main taps ; also fines collected for making attachments without permits.

STATEMENT "7." Showing by districts the amount of water rent, frontage tax and meter accounts remaining unpaid April 5, 1897.

The outstanding water rent is \$2.194.08 more and frontage tax is \$520.81 less than the previous year.

Respectfully submitted,

JAMES HANGEN, *Chief Clerk.*



## STATEMENT "1."—Concluded.

YEARS.	SIZES.											Total.	Area.
	¼	½	¾	1	1¼	1½	2	2½	3	4	6	8	
1883.....	333	.....	43	1	.....	.....	.....	.....	.....	.....	.....	.....	377 85,016
1884.....	449	.....	71	10	3	.....	1	.....	.....	.....	.....	.....	534 133,987
1885.....	431	.....	71	6	1	1	2	.....	.....	.....	.....	.....	512 129,773
1886.....	351	.....	66	7	1	2	3	.....	.....	1	.....	.....	431 130,141
1887.....	535	.....	76	7	3	2	7	.....	.....	3	1	.....	634 239,023
1888.....	566	.....	70	9	3	2	3	3	.....	.....	1	.....	657 268,593
1889.....	359	.....	62	19	4	1	4	.....	.....	2	.....	.....	451 156,980
Jan. 1, 1890, to Apr. 1, 1891.....	631	.....	98	23	2	3	1	.....	1	1	.....	.....	760 215,446
Apr. 1, 1891, to Apr. 1, 1892.....	530	.....	144	24	1	1	5	1	.....	.....	.....	.....	676 196,601
Apr. 1, 1892, to Apr. 1, 1893.....	774	.....	116	21	.....	1	6	.....	2	1	.....	.....	921 266,638
Apr. 1, 1893, to Apr. 1, 1894.....	680	.....	93	14	.....	2	5	.....	.....	1	1	.....	736 233,900
Apr. 1, 1894, to Apr. 1, 1895.....	323	.....	27	29	.....	.....	2	.....	.....	2	2	1	386 234,954
Apr. 1, 1895, to Apr. 1, 1896.....	430	.....	60	7	.....	.....	2	.....	.....	.....	1	.....	500 150,992
Apr. 1, 1896, to Apr. 6, 1897.....	350	.....	60	17	.....	.....	1	.....	4	1	2	.....	435 209,117
Total.....	7844	3031	1160	212	19	17	45	5	8	12	8	1	12,321 3852,1697
Area of each size.....	1540.1694	999.9105	12.4764	166.5048	213.316	30.0401	141.3716	24.543	56.5488	150.832	226.192	90.265	3852.169

## STATEMENT "2."

SHOWING BY DISTRICTS THE TOTAL NUMBER AND KIND OF  
PRIVATE ATTACHMENTS OF SERVICES, IN USE ON APRIL  
5TH, 1897 ; ALSO TOTAL HORSE POWER SERVICE ; ALSO  
THE NUMBER AND KIND OF SERVICE ATTACHMENTS  
ISSUED FROM APRIL 6TH, 1896, TO APRIL 5TH, 1897.

	First District.	Second District.	Third District.	Fourth District.	Total.
Hydrants.....	4445	2197	3640	6276	16558
Hydrants at Bar.....	58	18	35	72	183
Baths.....	1098	798	2118	2448	6462
Water Closets.....	706	576	1705	1147	4134
Wash Paves.....	332	342	705	574	1926
Urinals.....	40	36	74	100	250
Cellar Drains.....	55	40	6	43	144
Wash Basins.....	606	531	1240	995	3372
Beer Pumps.....	44	18	30	59	151
Horses.....	309	436	397	532	1674
Cows.....	12	5	46	27	90
Vehicles.....	150	260	305	235	950
Hotels and Restaurants.....	48	22	39	72	181
Stores.....	246	126	154	286	812
Fountains.....	7	7	8	11	33
Aquariums.....	1	3	4	1	9
Wash Tubs.....	24	2	67	48	141
Lawn Sprinklers.....	1	3	34	11	49
Candy Coolers.....	1		1	5	7
Bakeries.....	18	6	4	16	44
Water Troughs.....	4	4	5	19	32
Blacksmith Fires.....	53	9	5	80	147
Slop Hoppers.....		4	14	4	22
Air Pumps.....		2	1	2	5
Pantry Sinks.....		2	14	3	19
Sewing Machine Motors.....		1	1		2
Sinks.....	27	10	24	15	76
Heaters.....	5	4	10	7	26
Steam Kettles.....	2		1	2	5
Fire Hydrants.....	7	12	31	14	64
Total.....	8299	5462	10718	13077	37568
Horse Power.....	654.5	1765	1047	985.75	4452.25

**STATEMENT SHOWING MAIN ATTACHMENTS MADE FROM  
APRIL 6, 1896, TO APRIL 5, 1897.**

Size.	First District.	Second District.	Third District.	Fourth District.	Total.
½-inch.....	42	5	179	124	350
¾-inch.....	15	11	19	15	60
1-inch.....	2		12	3	17
2-inch.....				1	1
3-inch.....		3		1	4
4-inch.....				1	1
6-inch.....			2		2
Total.....	59	19	212	145	453

**DURING THE YEAR THE FOLLOWING ATTACHMENTS WERE  
REPLACED, WHICH ARE NOT INCLUDED IN THE  
ABOVE STATEMENT.**

Size.	First District.	Second District.	Third District.	Fourth District.	Total.
½-inch.....	38	3	4	22	67
¾-inch.....	19	9	9	17	54
1-inch ..	1	1	1	1	4
Total.....	58	13	14	40	125

**STATEMENT SHOWING THE PRIVATE ATTACHMENTS MADE  
FROM APRIL 6, 1896, TO APRIL 5, 1897.**

	First District.	Second District.	Third District.	Fourth District.	Total.
Hydrants in Yard.....	81	24	220	151	476
Baths.....	71	29	189	149	438
Water Closets.....	165	125	165	90	545
Wash Basins.....	83	29	103	61	276
Wash Pavcs.....	38	16	41	19	114
Urinals.....	9	4		11	24
Soda Fountains.....	1		1	2	4
Hydrant at Bar.....	2		1	1	4
Beer Pumps.....	1		1	1	3
Cellar Drains.....	6			9	15
Sinks.....	5	6	7	6	24
Steam Heating Boilers.....	2	1	5	2	10
Laundry Tubs.....	3	1	14	4	22
Steam Kettles.....	2				2
Water Troughs.....		3	1	2	6
Slop Hoppers.....			1	1	2
Laboraty.....			1		1
Air Pump.....			1		1
Total.....	469	238	751	509	1967



## STATEMENT "3."

SHOWING BY DISTRICTS THE NAME, LOCATION AND AMOUNT  
OF WATER RENT PAID BY CONSUMERS SPECIALLY RATED  
AND THOSE PAYING BY HORSE POWER AND WATER  
FURNISHED FREE, ETC.

## RATED PERSONS AND REVENUE.

## FIRST DISTRICT, 1896-1897.

NAME.	LOCATION.	AMOUNT.
Catharine M. Graeff.....	820-822 Penn street.....	\$ 30 00
St. Cath. Orphan Asylum.....	Franklin and Maple streets...	1 00
Total.....		\$ 31 00

## SECOND DISTRICT, 1896-1897.

NAME.	LOCATION.	AMOUNT.
Home of Good Shepherd.....	Fourth and Pine streets.....	\$ 1 00
Henry Grill.....	317 Bingaman street.....	6 00
First Presbyterian Church.....	Fifth above Franklin street...	40 00
St. James Luth. Church.....	Fifth and Chestnut streets.....	25 00
Academy of ImmaculateHeart	South Fifth between Chestnut and Spruce streets.....	1 00
Rajah Temple.....	Pearl and Franklin streets.....	11 50
St. Peters Parochial School...	Fifth and Spruce streets.....	1 00
Total.....		\$ 85 50

## THIRD DISTRICT, 1896-1897.

NAME.	LOCATION.	AMOUNT.
Central House.....	Penn street above Fourth.....	\$ 135 00
Consumers' Gas Co.....	Elm and Rose streets.....	5 00
Consumers' Gas Co.....	North Sixth street.....	20 00
Reading Hospital..	Spring street.....	1 00
Home for Friendless Children	Centre avenue .....	1 00
Christ Church.....	Fifth above Court street.....	40 00
Total.....		\$ 202 00

## FOURTH DISTRICT, 1896-1897.

NAME.	LOCATION.	AMOUNT.
Bernard Dreifoos.....	705 Penn street.....	\$ 3 00
Berks County Prison.....	Penn street above Eleventh...	300 00
St. Joseph's Hospital.....	Walnut and Birch streets.....	1 00
Berks County Court House.....	Sixth and Court streets.....	64 00
Homœopathic Hospital.....	137 North Sixth street.....	1 00
Reading Iron Co.....	Foundry North Eighth street	25 00
Reading Iron Co.....	Steam Forge N. Eighth street	450 00
St. Paul's R. C. Church.....	Ninth and Walnut streets.....	1 00
St. Paul's R. C. Church.....	Parochial school, Walnut st...	1 00
Widows' Home.....	Mineral Spring rd. and 16th st	1 00
S. H. and A. Kutz.....	Stable, Court street.....	30 00
Lewis Kremp.....	Stable, Moss street.....	30 00
P. & R. R. Co.....	Dispatcher's office, Oley st....	80 38
Total.....		\$ 976 38

## SUMMARY :

First District.....	\$ 31 00
Second District.....	85 50
Third District.....	202 00
Fourth District.....	976 38
Total.....	\$1,294 88

## HORSE POWER.

## FIRST DISTRICT, 1896-1897.

NAME.	LOCATION.	H. P.
Greth Machine Co.....	Franklin and Plum streets....	10
Jacob Goodman.....	Franklin and Peach streets...	7
Amos Spohn Est.....	616 Penn street.....	4
W. Rosenthal.....	710 Penn street.....	3
Mary C. Heizman.....	31-33 South Sixth street.....	3
Douglass & Connard.....	Sixth and Chestnut streets....	10
H. Johuson & Son .....	Eighth and Chestnut streets...	15
Shaafer & Horine.....	228-238 South Eighth street...	20
Davies, Printz & Co.....	South 9th below Bingaman St.	10
Chas. Kuhlman.....	417 South Ninth street.....	4
Margaret Mills.....	256 South Tenth street.....	1.50
Henry Hoover.....	South 13th near Cotton St.....	8
Dilvan Robbins.....	536 South 16½ street.....	5

FIRST DISTRICT—*Concluded.*

NAME.	LOCATION.	H. P.
Packer Cycle Co.....	755 Cherry street.....	15
A. C. Kleinschmidt.....	27 Peach street.....	4
Louis Weber & Co.....	Orange below Franklin St....	15
J. B. Fricker.....	809 Cherry street.....	8
Helfrich Bros.....	913 Cherry street.....	6
Neversink Mt. R. R. Co.....	Ninth and Bingaman streets...	30
Glaser, Frame & Co.....	940-958 Spruce street.....	1
A. J. Schlegel.....	1036 Muhlenberg street.....	10
Samuel Hoyer.....	1801 Cotton street.....	5
F. S. Keller.....	316 Plum street.....	15
J. R. Fritz.....	264 South Ninth street.....	4
W. Helfrich.....	515 South Eighteenth street...	9
Total.....		222.50

## SECOND DISTRICT, 1896-1897

NAME.	LOCATION.	H. P.
D. E. Houck.....	42 South Fourth street.....	1.50
E. S. Fox & Co. ....	2-4 Franklin street.....	20
West Reading Boiler Works..	Front and Chestnut streets...	12
Hercules Paper Bag Factory..	Front and Chestnut streets...	12
Agnes Mitchel Estate.....	117 South Third street.....	8
M. W. Vocum.....	318 South Third street.....	6
Allen N. Boyer.....	Cherry bet. Second and Third	6
J. Leippe Sons.....	Oak street.....	4
Reading Scale & Mach. Co...	Carpenter and Cherry streets	10
Kline & Shunk.....	Carpenter and Franklin sts...	35
Mary A. Sheeler.....	Carpenter below Franklin...	3
Henry Kerper.....	Pearl street near Chestnut, (Box Factory).....	10
Henry Kerper.....	Pearl street near Chestnut, Planing Mill).....	20
F. X. Blessing.....	Brewers alley.....	4
Thos. Addison.....	Gowan alley.....	3
Daniel Moser.....	Grape street.....	4
Henry Kerper.....	Kerpers court.....	2
Elijah Ammon.....	17 South Front street.....	5
Owen Drake.....	217 South Third street.....	4
Total .....		224.50

## THIRD DISTRICT, 1896-1897.

NAME.	LOCATION.	H. P.
Sarah Briner.....	301 Penn street.....	1
T. A. Willson & Co.....	Second and Washington sts...	25
W. K. Leaman.....	128 Washington street.....	5
Geo. Moyer's Estate.....	Elm and Rose streets.....	4
E. H. Zacharias.....	Washington above Front st...	8
Reading Hospital.....	Spring street.....	20
Tack Factory.....	North Third street.....	25
Reading Foundry Co.....	North Reading.....	100
Haubner & Heller.....	North River street.....	8
Jacob Derr.....	40 Hamilton street.....	6
Isaac Hollenbach.....	342 Schuylkill avenue.....	5
Reading Radiator Works.....	Front street and L. V. R. R...	6
Lewis Frederick.....	156 North Second street.....	8
Keystone Foundry Co. ....	Second and Court streets.....	12
Keystone Wagon Works.....	Third street and L. V. R. R...	35
Curtis, Jones & Co.....	Fifth and Court streets.....	20
Peter D. Getz.....	Court above Front street.....	2
D. H. Wenrich.....	Court above Front street.....	5
Jacob Snell.....	Court above Second street....	5
Deem & Bro.....	130 Church street.....	5
Casper Lotz.....	Church street.....	2.5
H. E. Kraemer.....	Pottsville pike.....	10
J. H. Crowell.....	19 North Third street.....	5
Ed. Luden.....	37 North Fifth street.....	4
J. B. Raser.....	148 North Sixth street.....	2.5
C. W. Levan.....	441 Penn street.....	5
Nyce Bros.....	Rose street.....	3
J. H. Millholland.....	13 North Fifth street.....	6
J. Hain Estate.....	Court above Third street.....	5
John Yerger.....	Pottsville Pike.....	5
Total.....		473.

## FOURTH DISTRICT, 1896-1897.

NAME.	LOCATION.	H. P.
Andrew Fichthorn.....	813 Penn street.....	1.5
A. H. Brumbach.....	435 Mulberry street.....	10
Rebecca Archer.....	607 Penn street.....	2
Reading Brewing Co.....	924 Walnut street.....	3
Rudolph Mertz.....	941 Buttonwood street.....	3
H. S. Bard.....	822-824 Buttonwood street....	40
Gasser & Johnson.....	Green and Moss streets.....	40
Niethammer & Hurst.....	1154 Green street.....	4
Wm. S. Miller.....	929 Douglass street.....	12
Thos. Jackson & Son.....	North Ninth street.....	60
J. Knabb & Co.....	11 North Sixth street.....	5
Wm. S. Ritter.....	31-33 North Sixth street.....	8

FOURTH DISTRICT—*Concluded.*

NAME.	LOCATION.	H. P.
Henry Schofer.....	229 North Eighth street.....	10
Reading Iron Co.....	Machine Shop North 8th St...	126
" " ".....	Boiler Shop " " ".....	4
" " ".....	Blacksmith Shop " " ".....	5
Aaron Yocum.....	Eighth and Elm streets.....	25
J. A. Strohecker.....	41 North Ninth street.....	4
Geo. W. Lerch.....	408 North Ninth street.....	4
Henry Weand.....	729 North Tenth street.....	3
Lena Trickle.....	550 North Eleventh street.....	4
Chas. Haage.....	Seventh and Court streets.....	15
W. K. Leitheiser.....	Court above Ninth street.....	15
P. F. Eisenbrown.....	Reed and Buttonwood streets	5
" " ".....	257 North Sixth street.....	3
A. Wilhelm Co.....	Poplar bet. Walnut and Elm..	40
Reading Wood Pulley Co.....	" " " " ".....	15
Boyer & Heilig.....	202 Cedar street.....	4
Henry Becker's Est.....	224 Cedar street.....	15
Reading Box Factory.....	259 Cedar street.....	7
Jacob Walter.....	1245 Moss street.....	6
H. F. L. Rummel.....	236 Moss street.....	38
Adam Peters.....	925 Greenwich street.....	3
Nolde & Horst.....	818-820 Moss street.....	38
Adam Bard & Son.....	Locust street.....	35
F. Herbst.....	North Ninth street.....	5
Epp & Newmoyer.....	Eighth near Green street.....	10
Geo. Schuler.....	1601 Perkiomen Ave.....	5
A. S. Esterley.....	North Sixth street.....	4
Magdalena Becker.....	503 North Tenth street.....	3
Wm. H. Huffert.....	1115 Douglass street.....	3
Jos. Hartman.....	1111 Spring street.....	6
E. B. Lutz.....	248 North Ninth street.....	2
Sarah Steltz.....	854 North Ninth street.....	3
Ellen Kalbach.....	1338 North Tenth street.....	4
Geo. J. Stark.....	307 North Thirteenth street...	3
H. E. Ahrens.....	Lombard street.....	20
A. Thalheimer.....	142 Cedar street.....	10
Israel Katius.....	415 Moss street.....	6
J. S. Oxenreider.....	1047 Locust street.....	10
Total.....		580.

## SUMMARY :

First District.....	222.50
Second District.....	228.50
Third District.....	473.
Fourth District.....	580.
Total.....	1504.

The following places are furnished water free of charge :

#### FIRE DEPARTMENT.

Keystone Hook and Ladder Co.....	\$	21 00
Neversink Fire Co.....		13 50
Reading Hose Fire Co.....		22 00
Junior Fire Co.....		17 00
Rainbow Fire Co.....		33 00
Friendship Fire Co.....		24 00
Liberty Fire Co.....		27 00
Hampden Fire Co.....		20 00
Marion Fire Co.....		28 00
Riverside Fire Co.....		12 00
Schuylkill Fire Co.....		5 00
Washington Fire Co.....		19 00
Total.....	\$	241 50

#### CITY BUILDINGS.

City Hall.....	\$	75 00
Water Superintendent's residence and reservoir grounds.....		25 00
Penn's Common.....		350 00
632 Fire Hydrants at \$25.00.....		15,800 00
Total.....	\$	16,250 00

#### SCHOOL BUILDINGS.

Boys' High School, Eighth and Washington sts..	\$	42 00
Jesse Orr Building, Laurel street above Fourth...		17 00
Thos. Severn Building, Seventh street bel. Laurel		19 00
Chestnut Street Building, Chestnut and Carpenter		11 00
Franklin Street Building, Franklin below Third..		8 00
George Lerch Building, Sixth below Chestnut....		16 00
J. Hagenman Building, Franklin and Peach sts...		13 00
Ninth and Spruce Building, Ninth and Spruce...		62 00
Bingaman and Orange Building, Bingaman and Orange streets.....		12 00
J. S. Richard Building, Twelfth and Chestnut sts.		16 00
Samuel Frees Building, Thirteenth and Cotton...		8 00
Seventeenth and Cotton Building, Seventeenth and Cotton streets.....		16 00
Poplar Street Building, Poplar above Washington		27 00

Henry S. Eckert Building, Tenth street above Washington .....	\$ 8 00
A. H. Phillippi Building, Tenth near Walnut.....	5 00
Elm Street Building, Elm street above Ninth.....	15 00
Mulberry Street Building, Mulberry beyond Green Tenth and Green Building, No. 1, Tenth and Green streets.....	20 00
Tenth and Green Building, No. 2, Tenth and Green streets.....	13 00
Edwin Ziegler Building, Tenth and Douglass sts.	13 00
Marion Street Building, Ninth and Marion sts....	24 00
Twelfth and Windsor Building, Twelfth and Windsor streets.....	19 00
J. H. Jacobs Building, Pear and Exeter streets...	21 00
C. B. McKnight Building, Church and Oley sts..	9 00
Lewis Briner Building, Fourth and Elm streets...	14 00
Washington Street Building, Washington and Rose streets.....	17 00
Ricktown Building, Hockley and Schuylkill ave.	27 00
Bechteltown Building, Second between Greenwich and Oley streets.....	8 00
Tenth and Union building, Tenth and Union sts.	13 00
Perkiomen avenue Building, Perkiomen avenue and Fifteenth streets.....	13 00
Schuylkill Avenue Building, Schuylkill avenue and Green street.....	21 00
Moss and Spring Building, Moss and Spring sts.	8 00
Girls' High School, Fourth and Court streets.....	13 00
West side of Twelfth street between Elm and Buttonwood.....	73 00
Northeast corner Twelfth and Greenwich streets	13 00
Buttonwood and Pear Building, Buttonwood and Pear streets.....	16 00
Total.....	13 00
Total.....	\$ 651 00

The following Charitable Institutions (nominally free) are assessed \$1.00 per year for water :

St. Joseph's Hospital.....	\$ 89 00
Reading Hospital.....	95 00
Homœopathic Hospital.....	23 00
Home for Friendless Children.....	37 00
St. Catherine Orphan Asylum.....	133 00
Reading Relief Society, Franklin and Plum sts..	8 00

Reading Relief Society, Moss and Spring streets..\$	15 00-
Home for Widows and Single Women.....	34 00
St. Paul's Parochial School.....	18 00
St. Peter's Parochial School.....	10 00
Academy of the Immaculate Heart.....	7 00
<hr/>	
Total.....\$	469 00



## STATEMENT "4."

SHOWING NAMES AND LOCATION OF CONSUMERS SUPPLIED BY METER MEASUREMENT, SIZE,  
MAKE AND WHEN PLACED.

NAME.	LOCATION.	SIZE.	MAKE.	WHEN PLACED.
Lauer Brewing Co.....	Third and Chestnut streets.....	1 in.	Crown	January 23, 1894.
" ".....	" " " ".....	1 in.	"	January 23, 1894.
" ".....	Third and Walnut streets.....	2 in.	"	January, 1887.
" ".....	" " " ".....	2 in.	Thomson	January 31, 1894.
H. F. Boyer.....	Sixth and Cherry streets.....	$\frac{1}{2}$ in.	"	May 17, 1894.
" ".....	" " " ".....	$\frac{1}{2}$ in.	Crown	May 17, 1894.
" ".....	" " " ".....	$\frac{1}{2}$ in.	"	May 17, 1894.
Dives, Pomeroy & Stewart.....	608-612 Penn street.....	2 in.	"	November, 1892.
" " " ".....	608-612 Penn street.....	1 in.	"	September 28, 1894.
" " " ".....	608-612 Penn street.....	$\frac{1}{2}$ in.	"	September 28, 1894.
Reading Brewing Co.....	Ninth and Laurel streets.....	2 in.	"	June 12, 1896.
" " " ".....	Ninth and Laurel streets.....	2 in.	"	October 3, 1896.
" " " ".....	Ninth and Laurel streets.....	$\frac{3}{4}$ in.	"	March 28, 1894.
Orr, Painter & Co.....	Front below Chestnut street.....	$1\frac{1}{2}$ in.	"	May 2, 1894.
" " " ".....	Front below Chestnut street.....	$\frac{1}{2}$ in.	"	May 2, 1894.
" " " ".....	Front below Chestnut street.....	1 in.	"	May 2, 1894.

## STATEMENT "4."—Continued.

NAME.	LOCATION.	SIZE.	MAKE.	WHEN PLACED.
Orr, Painter & Co.....	Chestnut above Front.....	1 in.	Crown	May 9, 1894.
Mt. Penn Stove Works.....	North Third street and L. V. R. R.....	1½ in.	Thomson	May 14, 1894.
" " ".....	North Third street and L. V. R. R.....	¾ in.	"	May 14, 1894.
" " ".....	North Third street and L. V. R. R.....	¾ in.	"	May 14, 1894.
John F. Boyer.....	City Hotel.....	¾ in.	"	May 16, 1894.
" " ".....	" ".....	½ in.	"	May 16, 1894.
" " ".....	" ".....	¾ in.	Crown	August 17, 1894.
Reading Iron Co.....	Sheet Mill, Water street.....	3 in.	"	April 27, 1894.
" " ".....	" " ".....	¾ in.	"	April 19, 1894.
" " ".....	" " ".....	¾ in.	"	April 19, 1894.
" " ".....	Rear Mill street.....	2 in.	Thomson	April 19, 1894.
" " ".....	Socket Mill.....	2 in.	Crown	January 26, 1893.
" " ".....	Blast Furnace.....	4 in.	"	November 14, 1894.
P. & R. Railway Company.....	Tank, Eighth and Green.....	4 in.	"	November 14, 1894.
" " ".....	Tank, Seventh and Spring.....	1 in.	"	July 18, 1894.
" " ".....	Main Depot.....	4 in.	"	August 22, 1894.
" " ".....	Forge, Lemon street.....	4 in.	"	September 18, 1894.
" " ".....	Machine Shop, Seventh and Chestnut streets	4 in.	"	November 24, 1894.
" " ".....	" " ".....	4 in.	"	August 4, 1896.
" " ".....	" " ".....	4 in.	"	August 3, 1896.



## STATEMENT "4."—Continued.

NAME.	LOCATION.	SIZE.	MAKE.	WHEN PLACED.
Chas. W. Hendel.....	Third below Pine street.....	2 in.	Crown	January 27, 1894.
" " .....	" " " .....	1½ in.	"	January 27, 1894.
P. Barbey & Son.....	Hockley and Gordon streets.....	2 in.	"	January 28, 1894.
" " " .....	" " " .....	2 in.	"	January 30, 1894.
C. F. Kessler.....	Eleventh and Spruce streets.....	¾ in.	Thomson	March 20, 1894.
" " .....	" " " .....	¾ in.	"	March 20, 1894.
" " .....	South Eleventh near Spruce.....	1 in.	Crown	January 26, 1894.
J. C. Mohn & Bro.....	South Eleventh below Chestnut.....	2 in.	Thomson	May 23, 1894.
" " " .....	" " " .....	1 in.	Hershey	June 25, 1894.
Frank Connard.....	1246 Oley street.....	¾ in.	Crown	May 1, 1894.
" " .....	" " " .....	¾ in.	"	August 17, 1894.
C. S. Birch.....	American House.....	¾ in.	Thomson	May 14, 1894.
" " .....	" " .....	1½ in.	Crown	May 9, 1894.
" " .....	Stable, South Fourth street.....	¾ in.	Thomson	May 15, 1894.
" " .....	43 North Fourth street.....	¾ in.	"	May 15, 1894.
Independent B. & S. A.....	Tenth and Windsor streets.....	¾ in.	Crown	February 25, 1895.
" " " .....	" " " .....	1 in.	"	April 4, 1895.
John Hendel's Sons.....	Fifth near Willow.....	3 in.	"	March 24, 1894.
" " " .....	" " " .....	2 in.	"	April 11, 1894.

Excelsior Laundry.....	101 South Sixth street.....	1½ in.	Thomson	May 6, 1893.
Hollis Bro.....	Franklin and Plum streets.....	¾ in.	"	December 8, 1893.
H. W. Hagen.....	49 South Sixth street.....	¾ in.	Crown	February 11, 1895.
John Boyer.....	532 Cherry street.....	1 in.	"	May 8, 1894.
Chas. G. Willson.....	Cherry above Fifth street.....	½ in.	"	March 4, 1894.
Jesse G. Hawley.....	Sixth and Penn streets.....	2 in.	"	November 13, 1893.
Wm. I. Goldman.....	602 Penn street.....	½ in.	"	May 2, 1894.
John D. Strunk.....	730 Penn street.....	1½ in.	"	August 18, 1893.
C. M. Groff.....	744 Penn street.....	1 in.	"	May 8, 1894.
J. B. Fricker.....	810½ Penn street.....	½ in.	"	February 11, 1895.
Kissinger & Dick.....	Stable, Peach street.....	¾ in.	Thomson	April 27, 1894.
Ignatius Shade.....	721-727 Franklin street.....	¾ in.	Crown	August 20, 1894.
B. F. Ruth & Co.....	South Eighth below Chestnut.....	1 in.	"	March 27, 1894.
W. P. Deppen.....	935 Chestnut street.....	2 in.	Thomson	May 16, 1893.
Excelsior Bottling Co.....	39 Maple street.....	¾ in.	Crown	January 22, 1894.
O. B. Wetherhold & Co.....	Tenth and Spruce streets.....	2 in.	Thomson	April 2, 1894.
R. H. Savage.....	Thirteenth and Muhlenberg streets.....	2 in.	"	April 2, 1894.
Reading Cotton Mills.....	South near Laurel street.....	6 in.	Crown	October 20, 1893.
Consumers' Gas Co.....	Canal and Fifth streets.....	3 in.	"	September 11, 1894.
Matthias Mengel.....	517 South Fifth street.....	½ in.	"	February 4, 1895.
Reading Fire Brick Works.....	Canal and Fourth streets.....	2 in.	"	June 23, 1894.
J. Harry Leippe.....	336 Pine street.....	1 in.	"	April 24, 1894.
A. S. Deysher.....	215 Pine street.....	1 in.	"	July 13, 1894.

STATEMENT "4."—Continued.

NAME.	LOCATION.	SIZE.	MAKE.	WHEN PLACED.
Reading Planing Mill.....	Spruce and Mifflin.....	2 in.	Crown	August 18, 1894.
George F. Lauer.....	122 South Third street.....	1 in.	"	January 4, 1894.
A. W. Fisher.....	116 Penn street.....	$\frac{3}{4}$ in.	Thomson	January 23, 1894.
A. A. Hoch.....	Stable, Wood street.....	$\frac{1}{4}$ in.	Crown	September 10, 1894.
Kate Muhlenberg.....	Stable, Cherry street.....	1 in.	Thomson	June 28, 1894.
James Schofer.....	108 South Fifth street.....	1 in.	Crown	October 28, 1894.
M. H. Schnader.....	Green House South Fifth street.....	1 in.	"	June 26, 1894.
Universalist Church.....	Franklin above Fourth street.....	$\frac{3}{4}$ in.	"	August 28, 1893.
Frank A. Tyson.....	333 and 335 South Fifth street.....	$\frac{3}{4}$ in.	"	August 17, 1894.
J. A. Seiverd.....	222 Pearl street.....	$\frac{1}{4}$ in.	Thomson	August 14, 1894.
W. A. Henry's Estate.....	518 Penn street.....	1 in.	Crown	November 28, 1893.
L. C. Stringer.....	527 $\frac{1}{2}$ Penn street.....	$\frac{3}{4}$ in.	"	October 18, 1893.
Mutual Fire Insurance Company.....	16-20 North Fifth street.....	$\frac{1}{4}$ in.	"	August 15, 1894.
Penn Troy Laundry.....	Washington and Ash streets.....	2 in.	"	December 22, 1893.
Public Building.....	Fifth and Washington streets.....	2 in.	"	June 27, 1894.
Herbert Ermentrout.....	132 Church street.....	$\frac{3}{4}$ in.	Thomson	February 13, 1893.
W. H. Luden.....	Sixth and Washington streets.....	$1\frac{1}{4}$ in.	Crown	April 21, 1894.
" ".....	" " " ".....	1 in.	"	May 15, 1896.
D. P. Davis.....	21 North Sixth street.....	$\frac{1}{4}$ in.	Nash	March 11, 1893.

P. Blasinger.....	608-610 Court street .....	1 in.	Crown	October 28, 1894.
W. B. Krick... ..	611 Penn street .....	2 in.	"	March 11, 1895.
Yocum Bros.....	Seventh and Walnut streets.....	2 in.	"	October 18, 1893.
Reading Cold Storage Company.....	Elm and Reed streets.....	3 in.	Thomson	March 18, 1893.
" " " .....	Reed below Elm street.....	$\frac{3}{4}$ in.	"	June 3, 1896.
Reading Steam Heat Company.....	Elm above Sixth street.....	4 in.	Crown	April 26, 1894.
Charles A. Saylor.....	411 North Sixth street.....	$\frac{3}{4}$ in.	"	May 1, 1894.
Gaenzle & Regenfuse.....	418 North Sixth street.....	$\frac{3}{4}$ in.	"	April 30, 1894.
Memorial M. E. Church.....	North Fifth street .....	1 in.	"	November 28, 1894.
J. G. Leinbach & Company.....	North Fourth street.....	3 in.	"	May 12, 1894.
Keystone Brewing Company.....	242 Ash street.....	2 in.	"	January 30, 1894.
Reading Knitting Mills.....	Fourth and Elm streets.....	1 $\frac{1}{2}$ in.	"	May 15, 1894.
Reading Malt Company.....	North Third street.....	1 $\frac{1}{2}$ in.	"	January 25, 1894.
Rick Bros.....	Third and Buttonwood streets.....	2 in.	"	May 11, 1894.
National Bolt, Nut and Rivet Works.....	Richmond street.....	2 in.	Thomson	May 2, 1893.
Haisch & Miller.....	Washington and Pear streets .....	1 in.	Crown	August 9, 1894.
Millholland Tube Works.....	Gordon street.....	2 in.	Thomson	April 7, 1894.
National Brass and Iron Works.....	Tulpehocken street.....	2 in.	Crown	May 6, 1894.
E. E. Hafer.....	433 $\frac{1}{2}$ Penn street.....	$\frac{3}{4}$ in.	"	April 30, 1894.
John Lee.....	447 Penn street .....	$\frac{3}{4}$ in.	"	April 30, 1894.
Charles Brenciser.....	7 North Eighth street.....	$\frac{3}{4}$ in.	Thomson	March 10, 1893.
Wm. R. Hinnershitz.....	51 North Ninth street.....	$\frac{3}{4}$ in.	"	March 10, 1893.
J. H. Fett & Son.....	36 Moss street.....	1 in.	Crown	August 24, 1893.

STATEMENT "4."—Continued.

NAME.	LOCATION.	SIZE.	MAKE.	WHEN PLACED.
Fries & Crossant.....	215 Moss street.....	½ in.	Crown	February 4, 1895.
Albert Thalheimer.....	141-143 Cedar street.....	1½ in.	"	September 30, 1895.
Geo. H. Felix.....	137-139 Cedar street.....	1¼ in.	"	November 3, 1893.
" "	138 North Ninth street.....	¾ in.	Thomson	February 15, 1893.
J. Conley Fetter.....	323 North Ninth street.....	½ in.	Crown	January 24, 1894.
Hebrew Church.....	533 North Eighth street.....	½ in.	"	December 27, 1894.
Reading Silk Mills.....	Eleventh and Marion streets.....	4 in.	"	July 11, 1894.
Berks Foundry Co.....	Hickory alley.....	¾ in.	"	August 20, 1894.
Diamond Steel Works.....	Exeter street.....	2 in.	Thomson	April 20, 1894.
M. Harbater.....	742 Centre avenue.....	¾ in.	"	January 26, 1893.
Y. M. C. A.....	Penn street above Sixth.....	2 in.	"	January 7, 1895.
Geo. M. Miller.....	8 South Fifth street.....	¾ in.	"	January 14, 1895.
Reading Tin Plate Co.....	Front and Bern streets.....	1 in.	"	March 27, 1895.
Hampden B. & S. Association.....	Tenth near Windsor.....	1 in.	Crown	April 6, 1895.
F. K. Miller.....	Eighteenth above Perkiomen avenue.....	1 in.	"	April 6, 1895.
Reading Bottling Works.....	395 Washington street.....	¾ in.	"	April 4, 1895.
Wm. P. Keim.....	823 North Fourth street.....	¾ in.	"	May 9, 1895.
First Baptist Church.....	Southwest corner Fifth and Chestnut streets.....	1½ in.	"	May 9, 1897.
F. S. Wertz & Co. ....	120 South Third street.....	1½ in.	Hershey	May 21, 1895.



Wm. H. Livingood.....	38 North Sixth street.....	$\frac{3}{4}$ in.	Crown	May 21, 1895.
Simon Kline & Son.....	Douglass and McKnight.....	$\frac{3}{4}$ in.	"	May 22, 1895.
Wm. G. Robinson.....	Schuykill avenue.....	$\frac{5}{8}$ in.	"	May 23, 1895.
W. H. Parker.....	North Sixth street.....	$\frac{5}{8}$ in.	"	May 23, 1895.
Printz & Pulmer.....	316 Maple street.....	$\frac{3}{4}$ in.	"	May 25, 1895.
Reading Candy Co.....	Eighth and Spring streets.....	$\frac{3}{4}$ in.	"	May 28, 1895.
John H. Printz & Co.....	North Sixth street.....	$\frac{3}{4}$ in.	Hershey	May 31, 1895.
" " " ".....	" " " ".....	$\frac{3}{4}$ in.	Crown	May 31, 1895.
" " " ".....	" " " ".....	$\frac{3}{8}$ in.	"	May 31, 1895.
" " " ".....	" " " ".....	$\frac{1}{2}$ in.	"	May 27, 1896.
T. D. Bausher.....	North Ninth street.....	$\frac{3}{4}$ in.	"	June 5, 1895.
D. F. Kerchner.....	22 North Sixth street.....	$\frac{5}{8}$ in.	"	June 6, 1895.
Keystone Iron Works.....	Third and Pine streets.....	2 in.	"	June 22, 1895.
Frank P. Lauer.....	Sixth and Penn streets.....	2 in.	"	July 18, 1895.
H. Nagle's Estate.....	13 North Eighth street.....	$\frac{3}{4}$ in.	"	September 30, 1895.
Relay Mfg. Co.....	Maple street.....	$1\frac{1}{2}$ in.	"	October 22, 1895.
E. M. Morgan.....	Mansion House.....	$1\frac{1}{2}$ in.	"	December 3, 1895.
Second National Bank.....	511 Penn street.....	$1\frac{1}{2}$ in.	"	December 8, 1895.
M. J. Earl.....	525 Penn street.....	1 in.	"	December 18, 1895.
M. S. Hershey.....	8, 12-804 Penn street.....	$1\frac{1}{2}$ in.	"	April 2, 1896.
Maria W. Rodgers.....	632-634 Penn street.....	$\frac{3}{4}$ in.	Trident	April 7, 1896.
P. Barbey & Son.....	435 Penn street.....	$\frac{3}{4}$ in.	Crown	May 20, 1896.
Henry H. Weber.....	1327 Mulberry street.....	$\frac{1}{2}$ in.	Thomson	May 10, 1896.

## STATEMENT "4."—Continued.

NAME.	LOCATION.	SIZE.	MAKE.	WHEN PLACED.
Henry T. Eberhard.....	133 North Tenth street.....	$\frac{1}{2}$ in.	Thomson	May 27, 1896.
John C. Hepler.....	Schuykill avenue and Greenwich street.....	$\frac{3}{8}$ in.	"	May 25, 1896.
Geo. W. Beears.....	1011 North Fifth street.....	$\frac{3}{8}$ in.	"	May 22, 1896.
Edgar Beears.....	904-910 Mulberry street.....	$\frac{3}{8}$ in.	Crown	May 4, 1896.
Mary A. McLeugan.....	1149 North Fifth street.....	$\frac{3}{8}$ in.	Thomson	May 25, 1896.
David H. Steckler.....	1018 Centre avenue.....	$\frac{3}{8}$ in.	"	May 25, 1896.
D. K. Kauffman.....	1520 Centre avenue.....	$\frac{3}{8}$ in.	"	June 2, 1896.
Peter D. Wanner.....	Corner Reed and Court streets.....	$\frac{3}{8}$ in.	"	June 8, 1896.
Penn Plating Works.....	436 Washington street.....	$\frac{3}{8}$ in.	"	June 8, 1896.
South Reading Market House.....	Pearl below Bingham street.....	$\frac{3}{8}$ in.	Crown	June 13, 1896.
R. & S. W. Railway Co.....	River Road and Chestnut street.....	$1\frac{1}{2}$ in.	Thomson	June 13, 1896.
Reading Bicycle Mfg. Co.....	Tenth and Exeter streets.....	1 in.	Crown	June 23, 1896.
Acme Mfg. Co.....	Elighth and Elm streets.....	3 in.	"	December 9, 1896.
Amos Kerst.....	1027 North River Road.....	$\frac{3}{8}$ in.	"	July 24, 1896.
Frank P. Esterly.....	Court and Poplar streets.....	$\frac{3}{8}$ in.	"	July 2, 1896.
Mrs. Chas. Goodman.....	North Third near Court.....	$\frac{3}{8}$ in.	"	July 1, 1896.
Christian Getz.....	1133 Moss street.....	$\frac{1}{2}$ in.	Thomson	August 1, 1896.
John S. Fritz.....	850 Penn street.....	$\frac{3}{8}$ in.	Columbia	August 1, 1896.
Henry Drumm.....	422-428 South Sixth street.....	$\frac{3}{8}$ in.	Crown	August 1, 1896.

A. Willhelm.....	730 Centre Ave.....	¾ in.	Crown	August 1, 1896.
Winter & Getz.....	Canal and Pine streets.....	1½ in.	Thomson	July 27, 1896.
Reading Straw Works.....	Second and Buttonwood streets.....	¾ in.	Crown	August 11, 1896.
Jackson & Hill.....	Windsor above Eighth street.....	1 in.	"	August 21, 1896.
A. J. Brumbach.....	Fourteenth above Muhlenberg.....	¾ in.	Thomson	August 24, 1896.
Stocker & Reubrich.....	Eleventh north of Berks street.....	1½ in.	Crown	September 12, 1896.
Reading Candy Company.....	Moss north of Robeson.....	¾ in.	"	September, 1896.
Union Transfer Company.....	Cedar and Court streets.....	¾ in.	Thomson	September 1, 1896.
Combine Association.....	22 South Seventh street.....	¾ in.	Crown	September 30, 1896.
Wm. F. Kempfle & Co.....	Water north of Bingham street.....	2 in.	Thomson	October 27, 1896.
Henry Crouse.....	1047 Penn street.....	¾ in.	Hershey	November 20, 1896.
Dr. J. S. Hinnershote.....	113 South Fifth street.....	¾ in.	"	December 18, 1896.
Mrs. Amelia Fried.....	220 Washington street.....	¾ in.	Thomson	February 9, 1897.
A. G. Green.....	329 Court street.....	¾ in.	"	March 10, 1897.
James W. Yeom.....	319 North Fifth street.....	¾ in.	Hershey	March 18, 1897.
Edward Seull.....	12 South Fifth street.....	¾ in.	Crown	March 13, 1897.
E. W. Alexander.....	1246 Jerklomen Ave.....	¾ in.	"	February 24, 1897.
Berks County Prison.....	Head of Penn street.....	3 in.	"	March 27, 1897.
J. H. Sternberg & Son.....	Third north of Buttonwood street.....	1 in.	Union	September 1, 1895.
" " " ".....	" " " ".....	2 in.	Thomson	September 1, 1895.
" " " ".....	Buttonwood east of Third street.....	3 in.	Crown	September 1, 1895.
Penn Hardware Company.....	Spruce near River.....	2 in.	Thomson	August, 1896.
Reading Foundry Company.....	Second above Chestnut street.....	1½ in.	"	August 5, 1896.

# STATEMENT "4."—*Concluded.*

NAME.	LOCATION.	SIZE.	MAKE.	WHEN PLACED.
Reading Foundry Co.	Chestnut above Second street.....	$\frac{3}{8}$ in.	Thomson	October 1, 1896.
Hoskin & Giles	37 North Tenth street.....	$\frac{3}{8}$ in.	Crown	June 1, 1896.
" "	Seventeenth and Haak streets.....	$\frac{3}{4}$ in.	Thomson	June 2, 1896.
C. W. Groff	Cherry below Eighth street.....	$\frac{3}{4}$ in.	Crown	May 13, 1896.

SUMMARY :  
SIZES.

MAKE.	1/2 in.	3/4 in.	1 in.	1 1/2 in.	2 in.	3 in.	4 in.	6 in.	Total.
Columbia.....		1							1
Crown.....	15	19	29	31	20	24	7	13	160
Hersey.....		3	1	1	1			1	7
Lambert.....		3	3		2	1			9
Nash.....	1								1
Thomson.....	2	7	12	1	4	7	1		34
Thomson Bee.....	4	3	3			6			16
Trident.....			1						1
Unioh.....				1					1
Total.....	22	36	49	34	27	38	8	13	230

TOTAL CONSUMPTION OF WATER BY METER MEASUREMENT  
AND REVENUE.

Cubic Feet.	Gallons.	Revenue.	Average Revenue per 1,000 Gallons.
53,662,600	401,424,152	\$16,217.89	\$0.0404
Average daily consumption on metered service, 4,782 gals.			

STATEMENT "5."

SHOWING AMOUNTS COLLECTED FROM VARIOUS SOURCES  
DURING THE YEAR AS SHOWN BY THE RECEIPIER  
OF WATER RENTS' CASH BOOK.

Water rents from dwellings, etc.....	\$123,679 81
Water rents penalties.....	448 53
Water rents, building purposes.....	717 50
Water rents received for street sprinkling :	
Rainbow Fire Co.....	92 80
Junior Fire Co.....	70 40
Reading Hose Fire Co.....	64 40
Friendship Fire Co.....	63 60

Liberty Fire Co.....	\$ 89 60
Washington H. & L. Co.....	68 00
Keystone H. & L. Co.....	86 40
Hampden Fire Co.....	96 00
Marion Fire Co .....	105 50
Schuylkill Fire Co.....	70 40
Charles Kline.....	52 40
Solomon Kachel.....	46 40
Total.....	<u>\$ 125,751 74</u>

### STATEMENT "6."

SHOWING BY MONTHS THE AMOUNTS RECEIVED AND PAID  
TO THE TREASURER FOR MAIN ATTACHMENT PERMITS  
ISSUED DURING THE YEAR, ALSO FINES COLLECTED  
FROM PLUMBERS FOR MAKING ATTACHMENTS TO  
PRIVATE SERVICE PIPE WITHOUT PERMITS.

April, 1896.....	\$ 173 00
May " .....	242 25
June " .....	180 25
July " .....	76 00
Aug. " .....	117 00
Sept. " .....	179 75
Oct. " .....	95 50
Nov. " .....	50 00
Dec. " .....	57 63
Jan. 1897.....	14 00
Feb. " .....	18 00
Mar. " .....	51 94
Fines.....	15 00
Total .....	<u>\$1,270 32</u>

## STATEMENT "7."

SHOWING BY DISTRICTS THE AMOUNT OF WATER RENT AND  
FRONTAGE TAX RETAINING UNPAID APRIL 1, 1897.  
ALSO THE OUTSTANDING METER ACCOUNT.

Districts.	From October 1, 1896, to April 1, 1897.	From April 1, 1896, to October, 1896.	Water Rents due prior to April 1, 1896.	Total.
First.....	\$1,194 69	\$300 50	\$ 47 00	\$1,542 19
Second.....	741 85	175 58	22 00	939 43
Third.....	1,280 11	296 75	15 75	1,592 61
Fourth.....	2,753 40	698 50	158 25	3,610 15
Total.....	\$5,970 05	\$1,471 33	\$243 00	\$7,684 38

## FRONTAGE TAX UNPAID APRIL 5, 1897.

Second District..... \$ 96 83  
Third District..... 1,248 44

Total ..... \$1,345 27

## METER ACCOUNTS OUTSTANDING APRIL 5, 1897.

Total ..... \$3,799 86

The greater part of the above amount is only due and payable during April, 1897.

# REPORT

—OF—

## INSPECTORS OF THE DEPARTMENT OF WATER

From April 6, 1896, to April 5, 1897.

READING, Pa., April 19th, 1897.

*To the Board of Water Commissioners :*

GENTLEMEN :

Your Inspectors beg leave to submit the following report of the work performed from April 6, 1896, to April 5, 1897. During this time leaks have been discovered on private service pipes in the various districts as follows :

### FIRST DISTRICT.

Leaking hydrants.....	140
“ service pipe.....	52
“ spigots .....	25
“ water closets.....	1
“ stop cocks .....	2
“ water trough.....	1
“ wash paves.....	1
Shut off for not repairing, 6.	

### SECOND DISTRICT.

Leaking hydrants.....	58
“ service pipes.....	34
“ spigots.....	12
“ water closets.....	1
“ wash paves.....	2
Shut off for not repairing, 2.	

### THIRD DISTRICT.

Leaking hydrants.....	44
“ service pipes.....	24
“ spigots.....	17
“ water closets.....	1
“ stop cocks.....	1
“ water troughs.....	2
Shut off for not repairing, 6.	



## FOURTH DISTRICT.

Leaking hydrants.....	87
“ service pipes.....	24
“ spigots.....	42
“ water closets.....	1
“ stop cock.....	1
“ water troughs.....	3
“ wash paves.....	1
“ cellar drains.....	2

Shut off for not repairing, 6.

Total leaks discovered..... 598

Total turned off for non-repairs..... 20

The balance were all repaired in the required time.

We also discovered the following attachments being used without the property owners paying for the same These were reported to the Clerk, who charged and collected the regular schedule rates for the same, viz.;

Hose or wash paves..... 71

Lawn sprinklers..... 2

During the year we turned off the water at 73 vacant houses and turned into 257 new houses and houses reported vacant and again occupied.

In addition to the above services we have read all meters monthly and delivered 4,926 bills and notices, etc., which were issued by the Water Clerk.

Respectfully submitted,

CHARLES E. MILLER,  
GEORGE J. BUTLER,

*Inspectors.*



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the 1990s, the number of people in the world who are undernourished has increased from 250 million to 800 million (FAO 1996).

There is a growing awareness of the need to improve the nutritional status of the world's population. The United Nations World Food Programme (WFP) has been instrumental in this regard, and has been successful in increasing the number of people who are adequately nourished from 1.1 billion in 1990 to 1.6 billion in 1995 (WFP 1996).

The WFP has been successful in increasing the number of people who are adequately nourished from 1.1 billion in 1990 to 1.6 billion in 1995 (WFP 1996). The WFP has been successful in increasing the number of people who are adequately nourished from 1.1 billion in 1990 to 1.6 billion in 1995 (WFP 1996).

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